

BANK RATE
AND THE MONEY MARKET

BANK RATE
AND THE MONEY MARKET
IN ENGLAND, FRANCE, GERMANY
HOLLAND, AND BELGIUM

1844-1900

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PREFACE

THE fact that the rate of discount charged at the Bank of England fluctuates more often and more severely than the rate at any other of the important banks of Europe led me to consider what the causes of this instability might be. There are several ways in which the position of the English Money Market is different from that of any other country, all which might have an influence in this direction. Among these are the constant liability to sudden and large demands for specie for export, and the long-standing arrangement by which the whole specie reserve of the entire country is placed practically with one bank alone, the Bank of England, thus causing any demand of this character to centre there. These reasons are of weight, but they appear hardly sufficient to account completely for what has occurred. After endeavouring fruitlessly to find explanations among the ordinary conditions of business for the great fluctuations in the rate of discount which have just been referred to as characteristic of the London Money Market, I was led to investigate the question whether the legal obligations under which the Bank of England carries on its operations could have anything to do with these fluctuations and consequently with the rate of interest charged.

No other bank, as will be explained further on, carries on its business under similar conditions. The banks on the continent of Europe are conducted under strict rules, stricter rules in some ways than those in force at the Bank of England. But at none of these banks are there conditions at all corresponding to those imposed by the Act of 1844.

To make this investigation out thoroughly required much purely statistical work, on which I have now been engaged for

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a long period. I put forward the results, not as my personal opinion, nor as a criticism of the principles of which the Bank Act is founded, but as an analysis of what has occurred since that Act came into force.

In carrying this work out, I have continued the investigation commenced by myself in 1873 with a paper read before the Economic Section of the British Association at their meeting at Bradford in that year. This paper was reprinted in the *Journal of the Statistical Society of London* for December, 1873, and afterwards published separately in 1874 under the title of *An Analysis of the Transactions of the Bank of England, for the Years 1844-72*. Since that date the connection between the Money Markets of England and of Europe generally has become so much closer that it was needful to carry the inquiry further and to include some notice of the transactions of the Banks of France and Germany. The results of this inquiry are given in the volume entitled *Bank Rate in England, France, and Germany, 1844-78*, published by Effingham Wilson in 1880. Subsequent events again called my attention to the subject, and I read a paper on it under the heading of "The Bank Acts of 1844-5, and the Bank Rate," before the Institute of Bankers, March 2nd, 1892. I reprinted this paper, in which the rates charged in Holland and in Belgium were also included, but as it and my previous publications on the subject are now out of print, I have been led to investigate the subject again and have brought the inquiry down to the close of the nineteenth century.

Thus this investigation, which was begun originally as an analysis of the accounts of the Bank of England, has gradually extended itself till it includes not only remarks on the Money Market of London, but on those of France, Germany, Holland, and Belgium. In all these countries, as well as in our own, a very great development in the business of banking has taken place during the last half-century.

But while business has extended itself very largely among those countries, this has not been accompanied with the same constant tendency to fluctuation in the rate of discount as has been the case in London, nor have the fluctuations been as sharp.

I have not thought it necessary to include the wonderful growth of banking operations which has taken place in the United States during the same period, because, although the growth in that country has been both proportionally and actually far larger than in Europe, and though the Money Market of New York is very closely connected with that of London, yet the circumstances of banking in the United States are so different from those which obtain in this country and on the continent of Europe that it did not seem possible to institute any useful comparison between them, for the purposes for which this volume is written. These are to call attention to: The increase needed in our specie reserve; and the desirability of maintaining greater stability in the rate of discount.

To take the first point:—The increase needed in our specie reserve. Whilst the reserve which the Bank of England keeps is now smaller in proportion to its own liabilities than it was forty or fifty years ago, it is far smaller in proportion to the liabilities of the other banks in the United Kingdom at the present time than formerly. Besides being smaller, the reserve may be weaker because the amount of specie required to be held against the note issues is relatively less. This follows from Clause V. of the Bank Act, 1844, which enacts that on the extinction of any portion of the note issue of the country banks of England and Wales an addition may be made to the issue of the Bank of England against securities to the extent of two-thirds of the amount of the country note issue cancelled. The effect of this has been since 1844 to increase the securities in the Issue Department of the Bank of England to the extent of £4,175,000. Of this amount of securities, £3,175,000 has been added since 1880. For an example of the manner in which this arrangement occasionally works out, the figures of the Issue Department as given in the returns of 2nd July, 1879, and 12th November, 1895, are quoted. The balance between the amount of notes issued, and those in the hands of the public is entered as "Notes" among the assets of the Banking Department and forms the greater portion of the reserve of the Bank of England. The gold held against these notes in 1879 and 1902 is shown in the figures which follow:—

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	ISSUE DEPARTMENT	2nd July, 1879.
Notes issued	£49,022,675	Government debt £11,015,100 Other securities 3,984,900 Gold coin and bullion 34,622,675 Silver bullion —
	<u>£49,022,675</u>	<u>£49,022,675</u>
		12th November, 1902.
Notes issued	£49,339,090	Government debt £11,015,100 Other securities 7,159,900 Gold coin and bullion 31,164,090
	<u>£49,339,090</u>	<u>£49,339,090</u>
Notes issued in 1879	£49,022,675	Gold in 1879 £34,022,675
" in 1902	49,339,090	" in 1902 31,164,090
Notes issued in 1902, more	316,415	Gold less in 1902 2,858,585
Gold less	2,858,565	Securities in 1902 as compared with 1879, more £3,175,000
	<u>£3,175,000</u>	<u>£3,175,000</u>

It is to the reserve of the Bank of England that the other banks must have recourse in any time of pressure. The Directors of the Bank of England consider, no doubt, that the reserve they maintain is adequate to their own requirements, but it is only needful to compare it with the vast amount of banking deposits now held to see how entirely inadequate it is to be the reserve of all the banks of this country. Matters have gradually drifted into this position. The arrangement is an anomalous one, but what we are concerned with now is not to discuss the manner in which it has arisen, but to consider how the existing system may be strengthened and improved.

The next point is: The desirability of maintaining greater stability in the rate of discount. Great instability in the rate of discount is a very prejudicial thing to the interests of commerce, and hence to those of banking. The close competition between one country and another renders it a far greater danger to our business now than previously. A supply of capital at a fairly low rate, and at a rate which may be expected to remain tolerably constant, is as important to trade as a steady supply of food and other necessities of life to

everyope, and of the materials on which he operates to the manufacturer. Instability in the rate for money tends to render the results of trade more uncertain than they otherwise would be, and is sufficient even to prevent business enterprises from being entertained which otherwise might be carried out to the advantage of the country. The chapters which follow show how much more equable the rate of discount has been at the Bank of France and at the Bank of Holland than in this country. Nearly the same may be said of the rates in Belgium and in Germany, although in Germany a higher rate has been charged than in this country; in the three other countries named the rates have not only been more equitable, but they have been lower.

In many ways the position of matters is greatly altered from what it was in the early years over which this inquiry has extended. Thus to take two directions only in which the rescrve of the Bank of England and the rate in consequence is affected. The first is through the great increase in the Scotch and Irish circulation. This increase causes larger demands on the reserve; these fifty years ago were comparatively small, but are now of serious importance. The next is the great increase in the note circulation of the Bank of England. Every bank note in the hands of the public, whether held by a banker or a private individual, means so much the less in the reserve of the Bank. It is doubtful whether, with the great growth in the use of cheques, a larger number of bank notes is really required, but the vast increase in the banking offices of the country, now about 6,700—probably not more than 1,000, if so many, in 1845—of itself causes a greater number of notes of the Bank of England to be entered as “issued” at all times. These notes are of necessity held by the banks in England and Wales as “till-money,” and they can scarcely be said to be in circulation. If these notes were in the Banking Department at the Bank of England the reserve would be considerably stronger. The requirements for Bank of England notes, now that the English country note issue is almost extinguished, thus help to increase the instability in the rate of discount. The following pages will explain all these matters more fully.

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I have endeavoured in them to bring together the main outlines of the facts in the belief that the information thus supplied may lead to a clearer understanding of the subject generally. And here I desire to express the hope that the large mass of figures and tables with which many of the following pages are filled will not deter anyone who desires to study the subject from entering on the investigation. Every effort has been taken to place the facts clearly before the reader, and to express the calculations on which they are founded in as concise a form as possible.

Every table was worked out, week by week, and month by month, into a series of yearly averages, in which form the book would have been published but for the doubt that this would have been too cumbersome for the general reader. The statement has therefore been brought out in groups, principally of ten years each. This method renders the main results more easily intelligible, but the absence of the yearly statements omits necessarily many points in detail which are not without interest to the student. The tables, however, as they stand show the history of what has occurred in a clear outline.

Many more persons are interested in banking questions now than at any previous time, owing to the increase both in the numbers of the shareholders and of the customers of banks. To all of these the questions dealt with in these pages are of interest, treating as they do, not only of the important subject of the banking reserve of the country, but of the severity of the fluctuations in the rate of discount.

In conclusion, I have to express my thanks to the proprietors and the editor of the *Bankers' Magazine* for permission to employ again materials which I had worked on in that journal. I desire also to recognise the help given me by many friends, especially those engaged in banking, who have assisted me in many ways and by valuable suggestions, for which I most cordially thank them.

R. H. INGLIS PALGRAVE.

BELTON, NEAR GREAT YARMOUTH,
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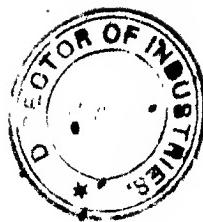
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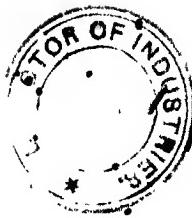
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BANK RATE AND THE MONEY MARKET IN ENGLAND, FRANCE, GERMANY HOLLAND, AND BELGIUM, 1844-1900

CHAPTER I INTRODUCTION

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THE weekly return of the Bank of England is always carefully studied as supplying much useful information on the position of the money market. The demands likely to be made on the "Reserve," and the proportion held by it to the "Liabilities," form the basis of most of those calculations which are continually being made by men engaged in business as to the probability of a rise or fall in the Bank rate of discount. The form in which the usual statement is made out supplies a great deal of information, but several very important points are left unnoticed. Thus, for example, no figures are now published of "several" details, the knowledge of which would be of great service to those engaged in business, as of the temporary advances made by the Bank or of the Bills discounted, or of the amount of the Balances kept by Bankers with the Bank both in London and in the Provinces.

As recently, however, as some twenty-five years ago, a great deal more information used to be given. Returns published from time to time by order of both Houses of Parliament contained a great deal of information on the subject. Some of the earlier returns are very full of detail both as to the composition of the deposits of the Bank and the manner in which they were employed. So many years, however, have elapsed since even the most recent of them were published, that they are now quite matters of "ancient history," and are unknown to the present generation of business men. To explain their characters and the class of information which they give I therefore bring in examples of these, the first, Table 1, being the details of the weekly statement of the Bank, on 7th September, 1844, the first return after the Act of 1844 came into operation, and the second, similar details for 1st January, 1848. Both of these are taken from the Report from the Select (Secret) Committee on Commercial Distress, 1848, House of Commons, Appendix No. 8.

TABLE I.

**Weekly Statement of the Liabilities and Assets of the Bank of England,
with full details, 7th September, 1844, and 1st January, 1848.**

7TH SEPTEMBER, 1844.

Circulation—	£	£	Public Securities—
London	14,802,000		Advances on Ex-
Country	6,405,000		chequer Bills—
		21,207,000	Deficiency
Deposits, Public, viz.—			Other Exchequer
Exchequer Account	2,198,000		Bills
For Payment of			870,000
Dividends	315,000		Exchequer Bills
Savings Banks, etc.	501,000		purchased
Other Public Accounts	617,000		311,000
		3,631,000	Stock and Annui-
			ties
			12,821,000
Deposits, Private, viz.—			14,002,000
Railways	30,000		Private Securities—
London Bankers	963,000		Bills discounted—
East India Co.	636,000		London
Bank of Ireland,			113,000
Royal Bank of			Country
Scotland, etc.	175,000		2,003,000
Other Deposits	5,631,000		
Deposits at Branches	1,209,000		2,116,000
			East India Bonds
		8,644,000	198,000
			City Bonds, etc.
		33,482,000	3,357,000
			Mort. ge
			620,000
			Advances—
			Bills of Exchange
			883,000
			Exchequer Bills,
			661,000
			5,719,000
			Bullion
			21,837,000
			15,209,000
			37,046,000

1ST JANUARY, 1848.			
Circulation—	£	• £	Public Securities—
Bonds	12,592,000		Advances on Ex-
Country	6,138,000		chequer Bills—
		18,730,000	Deficiency
Deposits, Public, viz.—			Other Exchequer
Exchequer Account	8,157,000		Bills
For Payment of			Exchequer Bills
Dividends	150,000		purchased
Savings Banks, etc..	15,000		Stock and Annui-
Other Public Accounts	690,000		ties
		9,012,000	10,279,000
Deposits, Private, viz.—			10,511,000
Railways	12,000		Private Securities—
London Bankers	1,029,000		Bills discounted—
East India Co	740,000		London
Bank of Ireland,			4,140,000
Royal Bank of			Country
Scotland, etc	181,000		3,960,000
Other Deposits	4,626,000		8,100,000
Deposits at Branches	1,035,000		East India Bonds
		8,523,000	405,000
		36,265,000	City Bonds, etc
			3,999,000
			Mortgage
			461,000
			Advances—
			Bills of Exchange
			2,529,000
			Exchequer Bills,
			Stock, etc.
			1,496,000
			8,890,000
			27,501,000
			12,404,000
			39,905,000

BANK OF ENGLAND,
15th January, 1848.

M. MARSHALL,
Chief Cashier.

The return marked No. 6 in the Appendix to the Report from the Select (Secret) Committee on Commercial Distress, House of Commons, 1848, may also be cited, as it carries the statement back to the date when the Bank Act came into operation. This return is reprinted, and continued to December, 1856, in the Appendix (No. 13) to the Report from the Select Committee on the Bank Acts, House of Commons, 1857. Subsequent returns continue a consecutive statement, on a uniform plan, from the date of the division of the two departments of the Bank of England, in 1844, to the close of 1875, containing particulars which are not disclosed in the ordinary returns, of the amount of bills discounted, the amount of temporary advances made by the Bank, and the balances of the London bankers. The commencement of this Return, extending from August 31st to December 28th, 1844, is given in Table 2, pp. 4, 5.

The return, however, which was ordered by the House of Commons to be printed 31st May, 1877, giving the statement for the year 1876, while it separates the amounts of the balances of the Exchequer and of the London bankers from

INTRODUCTION

[CH. I

TABLE 2.

REPORT FROM THE SELECT (SECRET) COMMITTEE ON COMMERCIAL

An Account of Bank Notes of the Bank of England held by the Public, and of Bank Rates of Exchange between London, Paris, Hamburg, and Amsterdam; also, of Bank of England; also, of the Total Amount of Bills Discounted; also, of the Total the Balances on the account of the Exchequer, and the Balances held on account of the latest date of the year, both days inclusive.

	BANK NOTES.		RATE OF EXCHANGE: LONDON ON		
	Held by the Public.	Held in Reserve by the Bank of England.	Paris 3 d/s.	Hamburg.	Amsterdam.
	£	£			
August 1844, 31 . . .	20,448,000	7,732,000	25'47½	13'10½	12'3¾
September 7 . . .	20,176,000	8,175,000	25'45	13'10⅓	"
," 14 . . .	19,881,000	8,620,000	25'45	13'11	"
," 21 . . .	19,618,000	8,965,000	25'47½	13'11¾	"
," 28 . . .	19,902,000	8,461,000	25'52½	"	12'4¼
October 5 . . .	20,153,000	7,930,000	25'50	13'11½	"
," 12 . . .	20,228,000	7,610,000	25'52½	13'10½	12'4
," 19 . . .	21,083,000	6,649,000	25'55	13'11½	"
," 26 . . .	21,321,000	6,225,000	25'57½	13'12	"
November 2 . . .	20,820,000	6,679,000	"	13'11¾	"
," 9 . . .	20,557,000	6,844,000	25'55	"	12'3¾
," 16 . . .	20,587,000	6,927,000	"	13'12	12'4¼
," 23 . . .	20,118,000	5,410,000	"	13'12¾	12'4¾
," 30 . . .	19,842,000	7,944,000	25'57½	"	12'5¼
December 7 . . .	19,531,000	8,286,000	25'60	13'11½	12'5
," 14 . . .	19,258,000	8,746,000	25'57½	"	12'3¾
," 21 . . .	19,192,000	8,960,000	"	13'11¾	12'5¼
," 28 . . .	19,123,000	9,077,000	25'60	"	12'5¾

TABLE 2 (*continued*).

DISTRESS, 1848, HOUSE OF COMMONS, APPENDIX NO. 6.

Notes of the Bank of England held in Reserve by the Bank of England; also, of the Total Amount of Bullion; also, of the Minimum Rate of Interest charged by the Amount of Temporary Advances; also, of the Total Amount of Deposits, including the London Bankers from the last day of each week from the 7th September, 1844, to

Total Amount of Bullion.	Minimum Rate of Interest.	Total Amount of Bills Discounted.	Total Amount of Temporary Advances.	Total Amount of Deposits, including Exchequer and London Bankers.	Balances held on account of the Exchequer and London Bankers included in the foregoing Column.
£ 15,315,000	Per Cent. 4	2,141,000	252,000	12,137,000	{ 1,592,000 E. { 1,480,000 B.
15,209,000	2½	2,116,000	252,000	12,275,000	{ 2,198,000 E. { 963,000 B.
15,198,000	"	2,137,000	602,000	12,892,000	{ 2,976,000 E. { 905,000 B.
15,159,000	"	2,162,000	1,193,000	13,805,000	{ 3,981,000 E. { 1,059,000 B.
15,022,000	"	2,193,000	2,165,000	14,297,000	{ 4,702,000 E. { 855,000 B.
14,702,000	"	2,259,000	2,814,000	14,427,000	{ 4,944,000 E. { 880,000 B.
14,445,000	"	2,310,000	2,792,000	16,378,000	{ 946,000 E. { 845,000 B.
14,190,000	"	2,394,000	690,000	12,472,000	{ 684,000 E. { 1,071,000 B.
14,097,000	"	2,481,000	577,000	11,847,000	{ 829,000 E. { 801,000 B.
14,039,000	"	2,810,000	625,000	12,228,000	{ 800,000 E. { 1,214,000 B.
14,116,000	"	2,863,000	625,000	11,994,000	{ 1,054,000 E. { 1,046,000 B.
14,231,000	"	3,047,000	1,047,000	14,909,000	{ 1,732,000 E. { 797,000 B.
14,366,000	"	3,094,000	1,148,000	12,676,000	{ 2,753,000 E. { 847,000 B.
14,558,000	"	3,503,000	1,154,000	13,571,000	{ 3,666,000 E. { 1,068,000 B.
14,445,000	"	3,407,000	1,423,000	14,718,000	{ 4,405,000 E. { 1,041,000 B.
14,444,000	"	3,268,000	1,612,000	14,706,000	{ 5,093,000 E. { 869,000 B.
14,943,000	"	3,200,000	2,140,000	15,424,000	{ 5,842,000 E. { 874,000 B.
14,878,000	"	3,029,000	2,585,000	15,677,000	{ 6,284,000 E. { 984,000 B.

the total deposits, does not continue to furnish either the amount of "bills discounted" or of the "temporary advances," which had been uniformly given from 1844 downwards in the previous returns. The corresponding return for 1877 is likewise deficient in the same manner, and in the return for 1878 the London bankers' balances were altogether left out. Thus from that date down to the present time bankers are absolutely ignorant of matters which are of the very highest importance to them. Every bank knows, of course, its own balance, and occasionally the amount of that of one or two of its neighbours, but there is no general knowledge of the amount of the collective balances of the bankers standing to their credit at the Bank of England as a whole.

These omissions are to be regretted, quite as much in the interest of the Bank of England itself as of the public at large. Discounting bills, and making temporary advances, are both proper functions of a bank. In the case of the Bank of England it is especially desirable that there should be no uncertainty as to the extent of its operation on these points, as it is mainly in this manner that its control over the outer market should be maintained. The full possession of that control, and the power of exercising it rapidly when circumstances render it needful, are essential to the security both of the Bank of England and of the other banks of the country, and it cannot therefore be an unimportant matter that the information which shows the action of the Bank in this respect should now no longer be supplied.

It would also be very valuable if the information given in return No. 8 in the Appendix to the Report from the Select (Secret) Committee on Commercial Distress, House of Commons, 1848, from which the details given in Table 1, pp. 2, 3, are taken, were continued to the present time. This return, which is carried back to the year 1832, through the Appendix to the Report from Select Committees on Banks of Issue, House of Commons, 1840 and 1841, gives a great deal of very important information as to the working of the Bank of England. It is no spirit of idle curiosity, no desire to pry needlessly into the concerns of others, that seeks for this information. Those who feel, as all concerned in banking

business must, that the enormous extension which that business has experienced in this country during the last half-century requires every safeguard to be strengthened, must regret that a closer secrecy is now maintained on matters on which more publicity was freely given at previous times when this publicity was less needed. If that information was valuable in 1832, 1844, and 1848, it would be even more valuable now.

Such information, however, as can be obtained from the materials at our command on the history of the working of the money market during the last fifty-six years may be very useful to all who are engaged in commercial pursuits. These years have witnessed a very marvellous extension of the business of the country in general; and the extension of banking generally has fully kept pace with the increase in other directions. It is now often scarcely remembered how recent any accurate information as to the details of banking is. When, in the year 1877, I commenced seeking to obtain this information, I remember being told that to collect it was impossible. No private banks at that time—and indeed for many years afterwards—published their accounts. Some even of the joint stock banks also did not publish their figures. These matters are managed in a different way at the present time. While, however, much more information is now given as to the position of banks in general, less, as has been mentioned, is given as to that of the Bank of England. The Parliamentary returns formerly published relating to the Bank of England, which dissected its transactions week by week, have not been continued since 1878, and though, as mentioned above, of late years they have given details less full than formerly, they contain the record of many important events. But the very length of these returns is a bar to facility in consulting them, or in understanding the many important lessons which may be learned from them. The number of details, through their very quantity, has a tendency to obscure a distinct view of the case. The old proverb expresses the truth exactly: "You cannot see the wood for the trees." It is hoped, therefore, that the analysis which follows may be of service by giving a history of the main alterations which have occurred in the position of the Bank of England during the

title over which the Parliamentary returns extend. It has been continued to the end of the year 1900 by employing the weekly returns of the Bank. The whole statement will assist us to trace out some of the causes which have led to the greatly increased fluctuations which have prevailed in the money market during some of the last few years.

It should be clearly understood from the outset that the object of this work is neither a controversial investigation into the working of the Act of 1844, nor a critical inquiry into the conduct of the Bank of England. Complete investigation into the working of that Act would require more space than could be allotted to the subject here, though it is hoped that the information given in these pages may be of service by showing some of the ways in which the Act of 1844 influences our business system, and bringing back to our remembrance some points in its working which are often overlooked. With regard to the Bank of England, that great institution is, from its position, the acknowledged centre of our banking system; and an analysis of its transactions may enable us to see more clearly the progress of recent events in the financial world. To render this clear and readily intelligible, a series of tables has been drawn up. Into these the main points of the work of the Bank of England for the years from 1844 to 1900 have been condensed. Through the arrangements of the Acts of 1844-5, for convenience spoken of as the Act of 1844 in this work, the note circulation of the United Kingdom is also connected with the working of the Reserve of the Bank of England. Every note of the Bank of England in the hands of the public means the abstraction of the value of that note from the Reserve of the Bank. This is, equally true, whether the note has been "issued" against gold which has been long in the coffers of the Bank or against fresh gold just received from abroad. The gold may remain in the Issue Department, but the Banking Reserve, which consists mainly of the notes in the Banking Department, is not strengthened. Every note issued in Scotland and Ireland, beyond the fixed limit of the circulation, has the same effect. The way in which this takes place is explained in Chapter VIII, p. 69 and Chapter XII, p. 112. Tables have hence been prepared showing the course

of the circulation of the notes of the Bank of England, of the English Provincial Banks, and of the Banks in Scotland and Ireland for the same period—from 1845 to 1900.

This has been done with the utmost care, and it is hoped that any error of importance has been avoided.

Since I first began to write on this subject, several events have occurred which have introduced very important influences among the money markets of Europe and America. The limitation in the coinage of silver by the countries forming the Latin Union; the resumption of specie payments in France, and also in the United States; the change in the standard of value in Germany from a silver to a gold basis; the creation of a gold standard by Russia; the official alteration in the par of exchange between this country and India; the establishment of a currency system in that country, sometimes described as gold monometallism, sometimes as a bimetallic system; the bimetallic system being on a different basis from that formerly prevailing—namely, on the ratio of 1 to 22—the one previously in force in Europe having been on that of 1 to 15 approximately; the great development of banking in these countries—all are events which could not take place without greatly affecting this country. These events have made it desirable to carry the investigation further than was first proposed. It has not been thought needful to form a complete analysis of the transactions of the Banks of France, Germany, Holland, and Belgium, in the same manner as that of the transactions of the Bank of England. A comparison of the rates of interest charged in the five countries, and of the number of the fluctuations in the rates, gives a sufficient outline for the purpose desired—an outline of the working of the demand and supply of money in the leading countries of Europe for the time under consideration.

Tables relating to the variations in the rate of interest charged by the Banks of France, Germany, Holland, and Belgium, drawn up on the same plan as the corresponding tables referring to the Bank of England, have therefore been added, and tables giving the number and extent of the alterations of the rates. These are valuable, as giving an outline of the working of business in those countries; they also supply a

comparative view of the movements of the rate of interest in other European centres of business which may enable us the better to understand the influences which are at work on our own.

A list of the tables which form the basis of this analysis precedes this chapter. The table (marked Table 3, pp. 11-15) analysing the accounts of the Bank of England in a series of annual averages follows.

NOTE TO TABLE 3—PAGES 11-15

The Annual Averages of "Notes Issued," as stated in the Weekly Returns of the Bank, are entered in col. 1; the Notes held in the Banking Department, in col. 7, p. 11; the Notes held by the Public are entered in col. 39, p. 15. The Notes issued at the Branches and held by the Public, and those issued in London and held by the Public, are entered in col. 35, p. 14 and col. 37, p. 15. These particulars are given up to the year 1881, when this information was discontinued. The Annual Averages of the Coin and Bullion held in the Issue Department are entered in col. 9, p. 11. The Coin held in the Banking Department is added to this, and entered in col. 41, p. 15, containing the Total Bullion held by the Bank: it is also entered, with the Notes held in the Banking Department, in col. 21, p. 13, which contains the Reserve of the Bank. It was notified on the publication of the Return of the Bank of England for the week ending Wednesday, January 8, 1873, that, with regard to the Deposits in the Return then issued, the practice was commenced of placing the Chancery Balances under the head of Government Deposits instead of under that of the ordinary Deposits of the public as heretofore. The average amount was about £1,000,000, and to that extent, therefore, the respective totals have undergone transposition. This must be borne in mind in comparing the amounts of the Public and Private Deposits from 1844 to 1872, and from 1873 onwards (cols. 13 and 15, p. 12).

During the years 1844-53 the Bank continually held some Silver Bullion, and also from November 28, 1860, to July 3, 1861. This is included in the amounts given in col. 9, p. 11, and also in col. 41, p. 15, of this Table. The stock of Silver thus held is shown in Table 10, p. 80.

Col. 43, p. 15.—Where the average of Bullion is *more* than the Liabilities, the figure is put in thick type, as 103, year 1844.

Col. 44, p. 15.—Where the average of Total Bullion is *more* than the Circulation, the figure is put in thick type, as 104, year 1876.

The date of the publication of the Weekly Returns was changed from the Saturday (Oct. 31st) to the Wednesday (Nov. 4th) in the year 1857. It has since been continued on the Wednesday.

The reader must bear in mind that the figures of the yearly statements are *annual averages*, and hence do not show the numerous fluctuations in the course of each year, with the exception of col. 3, which shows the amount of the securities held in the Issue Department on Dec. 31 of each year.

TABLE 3.

Annual Averages of the Transactions of the Bank of England for the Years 1844-1900.

Year.	1	2	3	4	5	6	7	8	9	10
	Annual Average of Notes Issued.	Proportion of Notes Issued to 1844. 1844 = 100.	Amount of Securities held in Issue Department on 31 Dec. in each year. 1844 = 100.	Proportion of Securities in Issue Department to 1844. 1844 = 100.	Proportion of Notes Issued against Securities (Col. 3). 1844 = 100.	Proportion of Notes Issued against Bullion (Col. 9).	Annual Average of Notes held in Banking Department to 1844. 1844 = 100.	Proportion of Notes held in Banking Department to 1844. 1844 = 100.	Annual Average of Coin and Bullion in Issue Department.	Proportion of Coin and Bullion in Issue Department to 1844. 1844 = 100.
1844	£ 27,934,000	100	14,000,000	100	50	50	7,853,000	100	13,935,000	100
1845	28,619,000	103	14,000,000	100	49	51	7,895,000	101	14,617,000	105
1846	28,163,000	101	14,000,000	100	50	50	7,877,000	100	14,163,000	102
1847	23,765,000	85	14,000,000	100	59	41	4,610,000	59	9,769,000	70
1848	27,196,000	97	14,000,000	100	52	48	9,108,000	116	13,196,000	95
1849	28,320,000	101	14,000,000	100	49	51	9,916,000	126	14,323,000	103
1850	29,943,000	107	14,000,000	100	47	53	10,545,000	134	15,949,000	114
1851	27,939,000	100	14,000,000	100	50	50	8,466,000	103	13,864,000	100
1852	34,079,000	122	14,000,000	100	41	59	12,222,000	150	20,077,000	144
1853	30,984,000	111	14,000,000	100	45	55	8,363,000	107	16,984,000	122
1854	27,303,000	98	14,000,000	100	51	49	6,504,000	83	13,304,000	96
1855	27,555,000	98	14,475,000	103	51	49	7,762,000	99	13,529,000	97
1856	24,783,000	89	14,475,000	103	58	42	5,135,000	65	10,306,000	74
1857	24,177,000	87	14,475,000	103	60	40	4,699,000	60	9,702,000	70
1858	31,604,000	113	14,475,000	103	46	54	11,190,000	143	17,129,000	123
1859	31,700,000	111	14,475,000	103	45	55	10,429,000	133	17,272,000	124
1860	28,973,000	104	14,475,000	103	50	50	7,702,000	98	14,408,000	104
1861	26,737,000	96	14,050,000	104	54	46	6,717,000	86	12,199,000	88
1862	30,175,000	103	14,050,000	104	48	52	9,330,000	119	15,525,000	111
1863	28,403,000	101	14,050,000	104	52	48	7,730,000	98	13,764,000	99
1864	27,412,000	93	14,650,000	104	53	47	6,849,000	87	12,771,000	92
1865	28,351,000	102	14,650,000	104	52	48	7,263,000	93	13,709,000	99
1866	28,922,000	103	15,000,000	107	51	49	5,764,000	73	14,009,000	101
1867	35,249,000	126	15,000,000	107	43	57	11,592,000	148	20,246,000	145
1868	34,649,000	124	15,000,000	107	43	57	10,727,000	136	19,662,000	141
1869	32,775,000	117	15,000,000	107	46	54	9,322,000	119	17,775,000	127
1870	34,877,000	125	15,000,000	107	43	57	11,564,000	147	19,877,000	142
1871	37,880,000	130	15,000,000	107	40	60	13,470,000	172	22,880,000	164
1872	30,918,000	131	15,000,000	107	41	59	11,390,000	145	21,808,000	158
1873	36,887,000	132	15,000,000	107	41	59	11,220,000	143	21,887,000	158
1874	36,550,000	131	15,000,000	107	41	59	10,270,000	131	21,570,000	155
1875	38,180,000	137	15,000,000	107	39	61	10,834,000	138	23,180,000	166
1876	42,870,000	145	15,000,000	107	35	65	15,137,000	193	27,857,000	200
1877	39,530,000	142	15,000,000	107	38	62	11,035,000	148	24,530,000	176
1878	37,942,000	136	15,000,000	107	40	60	9,885,000	126	22,942,000	165
1879	46,284,000	166	15,000,000	107	32	68	17,076,000	218	31,297,000	225
1880	41,661,000	149	15,000,000	107	36	64	14,748,000	188	26,662,000	191
1881	38,827,000	139	15,750,000	112	40	60	12,678,000	161	23,509,000	169
1882	36,791,000	132	15,750,000	112	43	57	10,826,000	138	21,043,000	151
1883	37,050,000	133	15,750,000	112	42	58	11,522,000	147	21,341,000	153
1884	37,751,000	135	15,750,000	112	42	58	12,373,000	158	21,991,000	158
1885	38,722,000	139	15,750,000	112	41	59	14,072,000	179	22,972,000	165
1886	35,548,000	127	15,750,000	112	44	56	10,869,000	138	19,778,000	142
1887	37,377,000	130	16,200,000	116	44	56	11,904,000	153	20,513,000	150
1888	35,633,000	128	16,200,000	116	45	55	11,350,000	145	19,433,000	140
1889	36,044,000	131	16,450,000	117	45	55	12,279,000	157	20,461,000	147
1890	37,66,000	133	16,500,000	117	44	56	12,629,000	161	20,800,000	150
1891	39,838,000	143	16,450,000	117	41	59	14,506,000	166	23,365,000	168
1892	40,743,000	146	16,450,000	117	40	60	14,914,000	190	24,281,000	174
1893	41,668,000	147	16,450,000	117	40	60	15,192,000	193	24,618,000	177
1894	48,089,000	174	16,800,000	120	34	66	23,439,000	299	31,916,000	230
1895	53,191,000	190	16,800,000	120	82	68	27,312,000	348	36,387,000	262
1896	58,802,000	211	16,800,000	120	29	71	32,290,000	411	41,980,000	302
1897	59,005,000	179	16,800,000	120	34	66	22,807,000	290	33,225,000	239
1898	48,049,000	172	16,800,000	120	35	65	20,602,000	263	31,242,000	224
1899	47,142,000	169	16,800,000	120	36	64	19,263,000	245	30,342,000	218
1900	49,232,000	176	17,775,000	127	36	64	19,797,000	251	31,663,000	228

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TABLE 3 (continued).

Annual Averages of the Transactions of the Bank of England for the Years 1844-1900.

Date.	11 Annual Average of Liabilities on Deposits (Public and Private), and Bank Post Bills. 1844=100.	12 Proportion of Liabilities to 1844. 1844=100.	13 Annual Average of Public Deposits. 1844=100.	14 Proportion of Public Deposits to 1844. 1844=100.	15 Annual Average of Private Deposits. 1844=100.	16 Proportion of Private Deposits to 1844. 1844=100.	17 Annual Average of Total Deposits. 1844=100.	18 Proportion of Total Deposits to 1844. 1844=100.
1844	14,317,000	100	5,231,000	100	8,069,000	100	13,300,000	100
1845	16,367,000	114	5,665,000	108	9,643,000	170	15,308,000	115
1846	20,262,000	141	6,254,000	120	13,070,000	161	19,324,000	145
1847	15,973,000	111	6,446,000	123	8,668,000	107	15,114,000	113
1848	15,963,000	111	5,154,000	99	9,809,000	122	14,963,000	112
1849	17,211,000	120	6,086,000	116	10,042,000	124	16,128,000	121
1850	18,822,000	131	7,772,000	149	9,825,000	122	17,597,000	132
1851	17,638,000	123	7,128,000	136	9,351,000	116	16,479,000	124
1852	20,149,000	140	6,010,000	115	12,836,000	153	18,846,000	141
1853	19,543,000	136	5,682,000	109	13,482,000	167	19,164,000	143
1854	15,740,000	110	3,641,000	70	11,016,000	130	14,657,000	110
1855	17,698,000	124	5,005,000	96	11,711,000	145	16,716,000	126
1856	16,864,000	117	4,840,000	93	11,183,000	139	16,023,000	120
1857	17,828,000	124	6,380,000	122	10,677,000	133	17,057,000	128
1858	20,847,000	145	5,884,000	113	14,139,000	175	20,023,000	150
1859	22,530,000	157	7,319,000	147	14,393,000	178	21,712,000	163
1860	20,803,000	145	6,646,000	127	13,518,000	167	20,164,000	151
1861	18,481,000	129	5,281,000	101	12,530,000	155	17,811,000	134
1862	22,414,000	156	7,052,000	135	14,042,000	181	21,694,000	163
1863	21,946,000	153	7,327,000	140	13,975,000	173	21,302,000	160
1864	20,600,000	144	6,870,000	132	13,199,000	164	20,069,000	150
1865	21,200,000	148	6,707,000	128	14,000,000	173	20,707,000	155
1866	22,603,000	158	5,318,000	102	16,746,000	207	22,064,000	165
1867	26,106,000	182	6,812,000	130	18,790,000	233	25,602,000	192
1868	25,619,000	179	4,906,000	94	20,169,000	250	25,075,000	188
1869	23,713,000	165	5,129,000	98	18,087,000	224	23,216,000	174
1870	26,358,000	184	7,635,000	146	18,100,000	224	25,735,000	193
1871	29,022,000	202	7,971,000	135	21,322,000	264	28,393,000	213
1872	29,268,000	204	8,875,000	169	19,986,000	248	28,801,000	210
1873	28,900,000	202	9,422,000	180	19,073,000	236	28,495,000	214
1874	25,476,000	178	6,251,000	120	18,847,000	233	25,098,000	180
1875	26,749,000	187	5,223,000	99	21,190,000	263	26,413,000	198
1876	30,616,000	214	6,793,000	130	23,403,000	291	30,286,000	228
1877	28,771,000	201	5,838,000	112	22,574,000	279	28,412,000	213
1878	29,077,000	203	5,560,000	106	23,229,000	287	28,780,000	216
1879	36,975,000	255	6,024,000	115	30,624,000	379	36,672,000	275
1880	33,297,000	232	7,861,000	150	26,138,000	323	32,950,000	247
1881	31,954,000	220	7,470,000	143	25,235,000	312	31,519,000	237
1882	29,970,000	237	5,660,000	108	23,066,000	292	29,740,000	223
1883	29,930,000	207	6,924,000	132	23,610,000	292	29,783,000	223
1884	31,450,000	217	7,288,000	139	23,984,000	296	31,271,000	234
1885	33,626,000	231	6,196,000	118	26,611,000	330	33,451,000	251
1886	29,352,000	202	4,983,000	95	24,001,000	297	29,177,000	219
1887	29,581,000	204	5,377,000	103	24,000,000	297	29,402,000	221
1888	31,141,000	214	6,443,000	122	24,508,000	303	30,951,000	232
1889	32,742,000	229	7,179,000	137	25,362,000	313	32,714,000	246
1890	33,574,000	231	5,840,000	112	27,526,000	341	33,364,000	250
1891	38,220,000	263	6,615,000	126	31,414,000	389	38,025,000	286
1892	36,449,000	250	5,856,000	112	30,282,000	374	36,266,000	272
1893	36,209,000	272	5,697,000	109	30,334,000	375	36,030,000	270
1894	41,105,000	283	6,196,000	133	33,628,000	416	40,943,000	307
1895	48,320,000	332	7,601,000	145	40,585,000	502	48,186,000	361
1896	50,948,000	413	10,418,000	199	49,390,000	614	59,808,000	449
1897	49,974,000	344	9,982,000	191	39,335,000	493	49,818,000	374
1898	49,902,000	344	10,501,000	261	39,286,000	485	49,785,000	374
1899	49,722,000	343	10,042,000	191	39,511,000	490	49,571,000	372
1900	50,049,000	345	9,285,000	178	40,602,000	503	49,887,000	374

• TABLE 3 (continued).¹

Annual Averages of the Transactions of the Bank of England for the Years, 1844-1900.

19 Annual Average London Bankers' Balances includ- ed in Private Deposits (Col. 5). 1844=100.	20 Proportion of London Bankers' Balances to 1844. 1844=100.	21 Annual Average Reserve of Bank of England (Notes & Specie). 1844=100.	22 Proportion of Reserve to 1844. 1844=100.	23 Proportion Reserves to Liabili- ties on Deposits and Bank Post Bills.	24 Proportion Reserves to Liabili- ties, De- ducting Bankers' Balances.	25 Proportion of London Bankers' Balances to Res.	26 Annual Average of "Other" Securities in Banking Depart- ment.	27 Proportion of other Securities to 1844. 1844=100.	Date.
£ 977,000	100	£ 8,500,000	100	% 59	% 56	% 11	£ 9,472,000	100	1844
1,256,000	128	8,516,000	100	52	48	15	12,215,000	129	1845
1,558,000	160	8,539,000	100	42	37	18	16,661,000	176	1845
1,467,000	150	5,291,000	62	63	26	27	17,221,000	182	1847
2,359,000	241	9,784,000	115	61	54	24	11,967,000	126	1848
2,131,000	218	10,694,000	126	62	57	20	10,222,000	108	1849
1,656,000	170	11,219,000	132	59	55	15	11,024,000	116	1850
1,666,000	170	9,103,000	107	52	46	18	12,642,000	133	1850
3,184,000	326	12,764,000	150	63	56	25	11,398,000	120	1852
2,259,000	231	8,907,000	103	46	38	25	15,086,000	159	1853
2,692,000	275	7,290,000	86	46	35	37	14,732,000	155	1854
3,005,000	313	8,366,000	98	47	36	37	15,316,000	162	1855
3,032,000	310	5,772,000	68	34	19	52	17,067,000	180	1856
3,274,000	335	5,347,000	63	30	14	61	20,392,000	215	1857
4,639,000	475	12,037,000	141	58	45	39	16,316,000	172	1858
4,256,000	435	11,076,000	120	49	37	39	18,196,000	192	1859
4,283,000	438	8,451,000	99	40	25	51	20,511,000	216	1860
4,185,000	428	7,611,000	89	41	24	55	18,738,000	198	1861
5,930,000	515	10,194,000	120	45	29	45	18,987,000	200	1862
4,726,000	484	8,536,000	100	39	22	55	20,176,000	212	1863
4,899,000	502	7,478,000	88	38	16	66	20,296,000	214	1864
5,038,000	512	8,089,000	95	38	19	63	20,568,000	217	1865
6,259,000	641	6,745,000	79	30	3	93	22,962,000	242	1866
6,689,000	685	12,906,000	152	49	32	52	18,235,000	192	1867
6,801,000	606	11,903,000	140	46	27	57	17,647,000	186	1868
6,479,000	663	10,320,000	121	43	22	62	16,822,000	178	1869
6,618,000	678	12,415,000	146	47	29	53	18,622,000	197	1870
8,390,000	859	14,102,000	166	48	28	59	18,803,000	198	1871
7,609,000	778	12,122,000	141	41	21	63	21,466,000	226	1872
8,586,000	878	12,051,000	141	41	17	71	21,643,000	229	1873
8,341,000	854	11,035,000	129	43	15	75	18,487,000	195	1874
10,324,000	1055	11,597,000	136	43	6	89	19,163,000	202	1875
11,851,000	1212	15,962,000	187	52	22	74	17,502,000	185	1876
9,543,000	976	12,478,000	146	43	15	77	18,861,000	200	1877
—	—	10,879,000	127	37	—	—	20,424,000	215	1878
—	—	18,262,000	215	49	—	—	20,836,000	220	1879
—	—	15,997,000	188	48	—	—	19,161,000	202	1880
—	—	13,775,000	102	43	—	—	21,100,000	223	1881
—	—	11,750,000	138	39	—	—	22,991,000	242	1882
—	—	12,401,000	146	42	—	—	22,124,000	233	1883
—	—	13,306,000	157	42	—	—	22,561,000	238	1884
—	—	15,137,000	178	45	—	—	£ 1,189,000	223	1885
—	—	12,148,000	143	41	—	—	20,716,000	219	1886
—	—	13,343,000	157	45	—	—	19,586,000	206	1887
—	—	12,688,000	149	41	—	—	19,912,000	219	1888
—	—	18,128,000	155	40	—	—	21,587,000	227	1889
—	—	13,384,000	161	41	—	—	23,410,000	247	1890
—	—	15,566,000	183	41	—	—	29,667,000	312	1891
—	—	16,071,000	189	43	—	—	26,227,000	277	1892
—	—	16,982,000	200	47	—	—	25,571,000	269	1898
—	—	25,816,000	304	63	—	—	21,314,000	225	1894
—	—	29,875,000	350	62	—	—	22,127,000	233	1895
—	—	34,455,000	407	58	—	—	29,281,000	309	1896
—	—	25,153,000	295	50	—	—	29,443,000	310	1897
—	—	22,920,000	209	49	—	—	31,805,000	336	1898
—	—	21,191,000	248	43	—	—	32,717,000	345	1899
—	—	21,455,000	251	43	—	—	29,474,000	310	1900

TABLE 3 (continued). •

Annual Averages of the Transactions of the Bank of England for the Years 1844-1900.

TABLE 3 (continued).

Annual Averages of the Transactions of the Bank of England for the Years 1844-1900.

37	38	33	40	41	42	43	44	45	46	
Annual Average of Notes held by Public issued in London.	Proportion of London Circulation to Total [Circl'n]	Annual Average of Total Notes held by Public.	Proportion of Notes held by Public to 1844. 44=100	Annual Average of Total Coin and Bullion held by the Bank.	Proportion of Bullion to 1844. 44=100	Proportion of Bullion to Col. 41	Proportion of Bullion to Liabilities held by Public.	Proportion of Total Bullion Col. 41 to Notes held by Public.	Annual Average of Minimum Rate of Discount.	Date.
14,740,000	68	20,250,000	100	14,664,000	100	108	72	42	2 10 0	1844
13,544,000	66	20,674,000	102	15,243,000	104	93	74	41	2 13 8	1845
13,482,000	77	20,252,000	100	14,785,000	101	73	73	38	3 6 6	1846
12,593,000	66	19,123,000	94	10,428,000	71	63	84	30	5 3 6	1847
12,256,000	68	18,086,000	89	13,872,000	95	87	77	41	3 14 5	1848
12,538,000	96	18,438,000	91	15,161,000	103	88	82	42	2 18 7	1849
13,188,000	88	19,448,000	96	16,636,000	113	88	86	43	2 10 1	1850
13,040,000	67	19,408,000	96	14,564,000	99	82	75	39	3 0 0	1851
14,970,000	69	21,910,000	108	20,587,000	140	102	94	49	2 3 0	1852
14,792,000	66	22,602,000	111	17,516,000	119	90	78	41	3 13 10	1853
13,308,000	64	20,688,000	102	13,997,000	95	89	68	38	5 2 3	1854
12,790,000	65	19,830,000	98	14,181,000	97	80	71	38	4 17 10	1855
12,697,000	65	19,007,000	97	10,932,000	75	65	56	30	6 1 2	1856
12,467,000	64	19,407,000	96	10,118,000	69	57	52	27	6 13 3	1857
13,368,000	68	20,238,000	100	17,847,000	122	86	88	43	3 4 7	1858
13,666,000	61	21,326,000	105	17,928,000	122	80	84	41	2 14 7	1859
13,342,000	63	21,252,000	105	15,239,000	104	73	72	36	4 3 7	1860
12,602,000	63	19,992,000	99	13,009,000	89	71	65	34	5 5 4	1861
13,355,000	61	20,835,000	103	16,380,000	112	73	78	38	2 10 7	1862
13,224,000	64	20,664,000	102	14,567,000	99	66	70	34	4 8 2	1863
13,035,000	63	20,005,000	102	13,482,000	92	65	65	33	7 8 0	1864
13,397,000	64	21,117,000	101	14,546,000	99	68	69	34	4 15 4	1865
14,679,000	63	23,159,000	114	14,887,000	101	65	64	33	6 19 0	1866
14,828,000	63	24,438,000	116	21,353,000	115	82	91	43	2 10 9	1867
14,942,000	62	23,932,000	118	20,838,000	112	81	87	42	2 1 11	1868
14,623,000	63	23,453,000	116	18,825,000	128	79	80	40	3 4 2	1869
14,497,000	62	23,327,000	115	20,776,000	142	79	89	42	3 2 0	1870
15,096,000	62	24,416,000	120	23,588,000	161	81	96	44	2 17 8	1871
15,641,000	81	25,523,000	126	22,585,000	154	77	88	41	4 2 0	1872
15,685,000	61	25,645,000	126	22,665,000	154	78	88	41	4 15 10	1873
16,110,000	62	26,205,000	130	22,294,000	152	87	85	43	3 13 10	1874
16,963,000	62	27,346,000	135	23,923,000	163	90	88	44	3 4 8	1875
17,371,000	63	27,734,000	137	28,605,000	160	93	104	49	2 12 1	1876
17,621,000	63	27,895,000	138	25,374,000	173	88	91	45	2 18 0	1877
18,068,000	84	28,058,000	138	23,952,000	163	82	85	42	3 15 8	1878
19,111,000	65	29,212,000	144	32,452,000	220	88	111	49	2 10 4	1879
17,620,000	65	26,915,000	133	27,636,000	188	83	103	46	2 15 4	1880
17,226,000	65	26,321,000	130	24,580,000	167	78	93	42	3 10 0	1881
—	—	25,935,000	128	21,992,000	149	74	84	39	4 2 8	1882
—	—	25,568,000	126	22,277,000	151	74	86	40	3 11 4	1883
—	—	25,358,000	125	22,907,000	150	73	90	40	2 19 1	1884
—	—	24,667,000	127	24,173,000	164	75	98	41	2 17 7	1885
—	—	24,659,000	127	21,018,000	143	72	85	38	3 1 0	1886
—	—	24,550,000	120	21,779,000	151	74	89	40	3 7 0	1887
—	—	24,283,000	120	20,770,000	141	66	85	37	3 5 11	1888
—	—	24,386,000	121	21,410,000	146	65	88	37	3 10 11	1889
—	—	24,561,000	122	21,8,8,000	148	65	89	38	4 10 5	1890
—	—	25,145,100	124	24,313,000	162	63	97	39	3 5 2	1891
—	—	25,863,000	128	25,519,000	179	70	99	41	2 10 7	1892
—	—	25,854,000	128	26,425,000	183	73	102	43	3 1 0	1893
—	—	25,202,000	125	34,309,000	234	83	138	52	2 2 3	1894
—	—	25,815,000	128	38,951,000	265	81	151	52	2 0 0	1895
—	—	26,374,000	131	44,334,000	302	74	168	51	2 9 8	1896
—	—	27,103,000	134	45,571,000	242	71	231	48	2 12 8	1897
—	—	27,447,000	136	33,561,000	229	67	122	43	3 4 10	1898
—	—	27,875,000	138	32,268,000	220	65	116	41	3 15 0	1899
—	—	29,396,000	145	33,321,000	227	67	114	42	3 19 6	1900

CHAPTER II

THE PRINCIPAL DIVISIONS OF THE ACCOUNTS OF THE BANK OF ENGLAND.

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WE will now proceed to examine Table 3, pp. 11-15, which is drawn up for the purpose of assisting us to understand the operations of the Bank of England by placing before us a complete summary of its published accounts, from the year 1844 to the close of the year 1900. These are stated in a series of annual averages. To each of the columns of amounts which the statement contains columns of proportional figures have been added, which show at a glance the proportion which the amount for each year bears to 1844. This method of exhibiting the development of the business will be found convenient by the reader, who is thus enabled to compare at one view the whole of the operations of the Bank.

The Bank of England has the largest paid-up capital of any

bank in the world, being £14,553,000; the "Rest," or accumulated and undivided profit, averages about 3 millions more. The total capital belonging to the Bank is therefore about 17½ millions.

Notes Issued, Specie and Securities in Issue Department.

Col. 1 of Table 3, p. 11, shows the average amount of "notes issued" as given in the weekly returns of the Bank. The securities held in the Issue Department are entered in col. 3, the notes held in the Banking Department in col. 7. A larger amount than that held by the Bank is always in the hands of the public. The notes issued at the branches are given in col. 35, p. 14, and those issued in London in col. 37, p. 15. The notes cannot be separated thus later than 1881, as this information has not been supplied further. The total amount of the notes in the hands of the public is given in col. 39, p. 15. The notes held by the Bank are also included together with the specie in the Banking Department in the amount of the reserve of the Bank, col. 21, p. 13. The total specie held by the Bank, both in the Issue and Banking Departments, is shown in col. 41, p. 15. The notes held by the Bank have increased proportionally more than those entered as "issued." These have increased in proportion more than those held by the public, as cols. 2, 8, and 40 shew. The bullion in the Issue Department, cols. 9 and 10, has increased in proportion more than the notes, cols. 2, 40. The securities in the Issue Department, cols. 3 and 4, have not increased as much. Hence the proportion of notes issued against bullion is larger, and that issued against securities is generally less in 1900 than in 1844.

Total Deposits and Bank Post Bills.

Col. 17 of Table 3, p. 12, contains the yearly averages of the total deposits of the Bank of England. These are now in a usual way nearly four times as large as in 1844. Col. 18 shows the proportion of the deposits in each year to 1844 and their progress each year. Occasionally, as it will be seen by the table, the progress has not been uniform, but, on the whole, it is continuous. Cols. 13 and 15 show the averages of the public deposits and of the private deposits.

The monthly fluctuations of the bullion in the Issue Department are given in Table 7, p. 71, and those of the Liabilities and the Reserve in Table 11, pp. 82, 83. The figures were largely affected in the years 1895 and 1896 by the payments made by the Chinese Government to that of Japan. A Chinese Loan was negotiated at Paris under a Russian guarantee in the latter half of 1895, some £8,000,000 having been paid over in October, and the remaining £5,000,000 in the month of November. The private deposits of the Bank had risen from an average of about £30,000,000 in 1893 and of £33,000,000 in 1894, to more than £40,000,00 in 1895, and £49,000,000 in 1896. The £13,000,000 lodged on account of the Japanese Government with the Bank was principally paid in bills, only a small part having been forwarded in specie. This immense sum practically never left this country; a small part was understood to have been repaid, as it came, in specie, but the remainder was employed in the building of ships, the purchase of naval and military stores, in these and other ways giving employment here. It does not appear to figure in the accounts of the Bank after the spring of 1896. The public deposits, col. 13, p. 12, are considerably larger now than in 1844, but the increase in them has been by no means so large as in the total deposits. Col. 14, which shows the proportion of the annual average to 1844, makes this point very clear. Col. 15 contains the annual average of the private deposits, and it is in these that the largest increase has occurred. In 1900 they were five times as large as in 1844, having been in 1896 six times as large. Col. 16 shows the proportion in each year; while the growth has been continuous, it has not been uniform. The amounts held during the last ten years show a very large increase, and examining this column gives a better idea of the growth of the business than any other statement that can be put before the reader. Col. 19, p. 13, shows the annual averages of the London Bankers' Balances from 1844 to 1877, the last year in which they were published. These are included among the private deposits shown in col. 15. The increase in them during the period for which the information is given was far larger than that of any other branch of the business of the Bank—the increase in them between 1844 and 1877 having been nearly

tenfold. The growth since 1877 has certainly been far larger. This subject will be dealt with more fully later on.

Col. 11, p. 12, contains the yearly averages of the total liabilities of the Bank of England, including under this head the amount of the deposits and of the Bank post bills. From this point of view we need not take the Bank note circulation into account, as that concerns the Issue Department and not the Banking Department of the Bank of England; the only liabilities, therefore, which have to be taken into consideration here besides the deposits, are the seven-day and other bills. These last have declined in amount greatly since 1854, the last year in which they were over £1,000,000. From averaging more than £1,000,000 in 1844, they have diminished to less than £300,000 in 1900. Hence it has not been thought necessary to tabulate the amounts of the Bank post bills separately. They are included with the public and private deposits in col. 11, p. 12. During the time under notice a very considerable increase in the liabilities of the Bank on deposits has taken place. The liabilities, which averaged about 14½ millions in 1844, averaged more than 50 millions in 1900, having thus much more than tripled in the course of that time; this growth, as will be seen by a reference to col. 12, has been gradual and continuous. It was not till 1860 or 1870 that the average deposits of the Bank much exceeded its capital; even at the present date the deposits are rarely equal to four times the amount of the capital. This is an unusually strong position for any bank to occupy. The capital of most banks bears generally a much smaller proportion to the deposits. In Scotland the proportion has on average been of late years 14 per cent. In Ireland it is from 19 to 20 per cent. In the United Kingdom generally the average is 15 per cent., though with many banks it is distinctly higher.* The position of the Bank of England in this respect is unusually and exceptionally strong.

The Reserve.

In a similar manner, though not by any means in a like proportion, the average reserve has increased. The annual

* See articles on the "Progress of Banking," numbers for January, February, April to June in *Bankers' Magazine*. Published by Waterlow and Sons, Limited.

average of the reserve, with a statement of the proportion each year from 1844, will be found in cols. 21 and 22, p. 13. The average reserve, from being $8\frac{1}{2}$ millions in 1844, has increased to nearly $21\frac{1}{2}$ millions in 1900. In col. 23 is given the average proportion of the reserve to the liabilities on deposits and Bank post bills. This is generally very considerable. It has been as high as 63 per cent. in 1852, and again in 1894; it was as low as 30 per cent. in 1866. It rose in 1867 to 49 per cent., and has since never averaged less than 37 per cent. This proportion was marked in 1878. But the reserve has sometimes been comparatively low of recent years, and the proportion was only 43 per cent. in 1899-1900. In looking down col. 23, a distinct, though gradual, diminution in the proportion of the reserve to the liabilities becomes obvious. And it is not only the proportion of the reserve to the liabilities which has altered; the character of the demands which may be made upon the reserve has, during the last twenty-five years, undergone a great, though a gradual alteration. This is indicated by the great increase in the balances which the London bankers have kept with the Bank of England; these amounts are more likely to be drawn on severely and sharply in a time of pressure than any other money kept with the Bank of England.

We will now proceed to consider the amounts of these balances, the proportion which they bore to the reserve of the Bank of England between the years 1844 and 1877, and their position at the present time.

Bankers' Balances.

Col. 19, p. 13, contains the annual average of the London bankers' balances from 1844 to 1877, when the publication ceased. In these there was, as long as the published figures allowed the matter to be traced, a very considerable and progressive increase, far larger than the increase in the reserve itself. The particulars of this are not given in the weekly statements, and it is only the returns published by order of the House of Commons which supply this valuable information. The average amount of each year, which was less than 1 million in 1844, had become more than $9\frac{1}{2}$ millions in 1877, the latest date to which the information can be given. By the balances

of "the London bankers," it is understood that the balances of "the clearing bankers" are described. There are, therefore, doubtless other amounts than these belonging to bankers, and really forming a portion of the general reserve of bankers with the Bank. There are now many important banks located in the metropolis, besides the London banks properly so called, among which are Scotch banks, Irish banks, Colonial banks, and many foreign banks. Most of these do large businesses in London, and doubtless keep corresponding sums of money in reserve. There are also large sums of money kept with the branches of the Bank of England at Manchester, at Liverpool, and elsewhere, by provincial banks, which often do business on a large scale, quite comparable with that of many London banks. These sums are all, properly speaking, "bankers' balances," and the amounts being kept for the same purpose, should be included in the same statement. We can, however, only deal with the figures as stated in the published returns. The increase of the figures was progressive, and, so long as it was recorded, proceeded in a far more rapid proportion than the increase of the reserve of the Bank of England itself, or of any other branch of its business. Col. 20, p. 13, contains the proportion which the ledgers of the London bankers bore during each year to their amount in 1844; this enables us to follow their fluctuations with facility. In col. 25 the proportion per cent. of the average bankers' balances to the reserve is given. From being only 11 per cent. of the total reserve in 1844, the proportion increased to 93 per cent. in 1866; and, though it did not always remain at that high figure, it was more than 75 per cent. in the years 1873-77. Thus, from being but a small fraction of the reserve in the early years over which the table extends, the amount increased to being equal to three-quarters of the average reserve at the date last mentioned. Col. 21 shows the proportion which the reserve would have borne to the liabilities if the bankers' balances had not been included. It shows how largely the bankers' balances assist to keep up the amount of the resources of the Bank. It is the practice of the London Banks to keep their principal reserve against immediate demands with the Bank of England, as being the easiest and safest plan. And as their

business has extended, so they have also increased the balances to the credit of their accounts with the Bank of England. As far as the connection between the two can be traced, it appears that the amounts of the bankers' balances (the bankers' reserves) were, when the publication of the amounts ceased, much larger in proportion to their liabilities than they had been twenty-five years before; while the proportion of the reserve of the Bank of England to its own liabilities was somewhat smaller. This subject is so important that it is dealt with separately in Chapter III., p. 34. No doubt a very considerable portion of the increase in the balances of the London bankers is due to the necessity of holding larger sums at the Bank of England, consequent on the development of the Clearing House system, and the admission of the principal London joint stock banks to that establishment, arranged in the years 1853 and 1854.

The Note Circulation.

The effect of the alterations consequent on the admission of the Joint Stock Banks to the London Clearing House may be traced in the diminution of the metropolitan note circulation of the Bank of England about that time. The annual averages of the notes held by the public issued at the branches and in London are shown in cols. 35 and 37, pp. 14, 15, of this table, up to the close of the year 1881. Since that date no information has been published on this subject. Between 1844 and 1875 the provincial circulation had increased more rapidly than the circulation which centres in London. If the same course has been followed to the present time, nearly half the note circulation of the Bank of England now proceeds from the branch offices. As mentioned above, a distinct diminution in the metropolitan circulation, given in col. 37, p. 15, is observable about 1855. And from that date also, following on the admission of the joint stock banks to the Clearing House, the proportion borne by the balances of the London bankers to the reserve of the Bank of England, which had not ever previously exceeded 20 per cent. of that reserve, rose till, as previously mentioned, the bankers' balances became, between 1873 and 1877, usually about three-quarters of the reserve. The total amount held by

the public and the proportion to that in 1844 are shown in cols. 39 and 40, p. 15. The note circulation and the bullion in the Issue Department are stated in Tables 6 and 7, pp. 70, 71.

The Bankers' Balances and the Reserve.

The enormous amounts, as £109,143,000, May 15, 1901, which pass through the Clearing House, especially on Stock Exchange "settling days," when totals of 60 millions, 70 millions, and more are often cleared, leave large differences to be adjusted through the "clearing bankers'" account with the Bank of England. Due preparation has to be made to meet these differences, and very large amounts are required on these occasions.

What is paid away by one bank in this manner, is, however, received by another. The "money" remains equally with the Bank of England, whether it stands to the credit of one bank or of another bank. Taking the amounts held on deposit by the bankers in London into consideration, and the demands which may be made on them on that account, it would appear that the balances which they keep with the Bank of England rather represent what should, with strict accuracy, be called their "Till Money" than their "Reserve." "Till Money," as everyone concerned in banking knows, is the amount which every banker is bound to keep close at hand ready to meet the calls of the moment, as cheques are presented over the counter. An adequate supply of "Till Money" is indispensable to the proper conduct of a banking business, but it cannot be looked upon as a "Reserve." A "reserve," though equally needed to meet immediate calls, must be on a far larger scale than the mere amount of cash necessarily held in the "till." And taking into consideration, as just mentioned, the vast amounts of deposits held by London bankers, and the demands which may be made on them at any time, the balances they keep with the Bank of England must be considered as the cash needed for immediate requirements—that is to say, the "Till Money"—transferred for convenience sake to the custody of the Bank of England, rather than a really adequate banking reserve.

The growth and development of the London bankers' balances and the proportion they stood in to the reserve of

the Bank of England will be clearly shown if we divide the period from 1846 to 1877 into four groups of eight years each. This comparison cannot be carried later than the year 1877, because that was the last year in which the amount of the bankers' balances was published. The averages are as follows :—

Statement for years 1846-53.	Proportion per Cent. of Reserve of Bank of England to Liabilities.	Proportion per Cent. of Bankers' Balances to Reserve of Bank of England.
Averages of the years 1846-53	52 per cent.	21 per cent.
" " 1854-61	43 "	45 "
" " 1862-69	42 "	60 "
" " 1870-77	45 "	70 "

In the earliest group, the proportion of the reserve was more than half the liabilities. This proportion, it will be seen, on the whole declined, while the proportion which the balances of the London bankers bore to the banking reserve itself steadily increased. Though the progress of the balances of the London bankers kept with the Bank of England cannot be traced through any published statements beyond the year 1877, yet it is well known that they are far larger now than at that date. And as these amounts are included among the total deposits of the Bank, it becomes clear how very considerable a part of the increase of those deposits is due to this source. The general effect may be seen by comparing the figures in col. 17, p. 12, with those in col. 19, p. 13. It might be thought that these deposits would be the most certain to diminish in times of pressure, but, on the contrary, they are certain to rise at such a time. Thus they greatly increased during the panics of 1857 and 1866. Between the 4th and the 25th of November, 1857, the bankers' balances increased 2 millions; rising from £3,400,000 on the 4th November, to £5,400,000 on the 25th November. In 1866 the action of the bankers was more rapid. On the 9th May, 1866, their balances were £5,000,000; by the 16th—that is to say, in one week—the amount had increased nearly 3 millions, the figures being £7,900,000. Beyond doubt, a great portion of these sums had been derived from the Bank of England itself, as the temporary advances during that time increased nearly 5 millions, and the amount of bills discounted also increased to about the same extent. The

reserve of the Bank of England had diminished during the same time, from the 9th to the 16th May, more than 4 millions, from £4,900,000 on the earlier date, to £700,000 on the later. A great portion of that amount had undoubtedly been drawn by the London bankers. The immediate response to the call of necessity speaks very well for the manner in which the reserves of money at short dates were placed, for the prudence with which the banking business of the country generally was carried on, and also for the liberality shown by the Bank at a period of great national peril.

A more recent instance of the manner in which the balances of the London bankers are increased during a time of anxiety was shown in the year 1875. On May 31st in that year the failure of Messrs. Sanderson and Co., the Discount Brokers, of Lombard Street, was announced simultaneously with that of the Aberdare and Plymouth Iron Companies, some anxiety having existed for a short time previous; and on June 15th the bankruptcy of Messrs. A. Collie and Co. took place, accompanied with the downfall of a host of minor traders who were involved in their ruin.

The influence of these events on the balances of the London bankers was very remarkable. The particulars are as follows:—

BANK OF ENGLAND.

	Other Deposits	Balances of Lenders, Particular (minus the amount of other Deposits)	Other Securities	Reserve, Notes and Coin.
1875	£	£	£	£
May 5	17,209,000	700	18,623,000	8,399,000
" 12 "	17,192,000	700	19,151,000	8,304,000
" 19 "	17,030,000	91	17,715,000	9,159,000
" 26 "	19,437,000	113	19,055,000	10,344,000
June 2	21,625,000	120	21,377,000	10,076,000
" 9 "	20,074,000	110	20,099,000	11,061,000
" 16 "	19,517,000	113	18,334,000	12,385,000
" 23 "	22,841,000	123	21,186,000	13,072,000

A very great rise also took place in the "other" deposits of the Bank of England in October, 1878. On the 2nd of that month the stoppage of the City of Glasgow Bank was announced. The movement in the "other" deposits of the Bank, consequent on this event, was as follows:—

BANK OF ENGLAND.

		Other Deposits.		Other Securities.		Reserve, Notes and Coin.
	1878					
September 25	.	£ 20,087,459	Sept. 25 = 100	£ 17,333,000	100	£ 12,254,000
October 2	.	21,938,505	109	20,028,000	116	10,772,000
" 9	.	25,967,071	129	20,930,000	121	10,215,000
" 16	.	27,321,433	137	23,024,000	133	8,517,000
" 23	.	27,859,388	139	23,312,000	135	9,166,000

A large portion of this increase in the deposits was attributed at the time to additions made to the bankers' accounts, but as the particulars of the London bankers' balances have not been published since 1877, the details have not been made public. A similar movement was observable in November, 1890, and it is desirable to recapitulate the circumstances. The announcement of the involved position of Baring's was made by the Bank of England on Friday, November 14th. The Bank rate had been raised to 6 per cent., as a precautionary measure, on November 7th, which was Friday—a very unusual day for a change, the regular day being, as is well known, Thursday, the Court day at the Bank. It was nearly a week before the City generally was informed how matters really stood. On the afternoon of Friday, November 14th, a meeting of leading City men was held at the Bank, and a guarantee commenced, which, at a further meeting held on the 15th, was brought up to the amount of £8,000,000—£9,000,000 required to stave off a forced liquidation. In the next return of the Bank of England the "other" deposits had increased £6,000,000, which may hence be concluded to have been added to their balances by the bankers between the 15th and the 19th. The following statement shows the course of events :—

BANK OF ENGLAND.

		Other Deposit.		Other Securities.		Reserve, Notes and Coin.
	1890					
November 5	.	£ 26,172,000	Nov. 5 = 100	£ 23,128,000	100	£ 11,206,000
" 12	.	30,286,000	104	25,067,000	108	11,105,000
" 19	.	36,436,000	125	34,136,000	139	14,552,000
" 26	.	34,990,000	120	29,920,000	129	16,503,000
December 3	.	33,313,000	114	27,517,000	110	16,673,000
" 10	.	32,643,000	112	27,573,000	118	17,007,000
" 17	.	33,199,000	114	28,603,000	124	16,763,000

In all these periods of pressure the increase in the "other" deposits has been accompanied by a generally corresponding increase in other securities. This indicates that in round figures what has been borrowed from the Bank, or a great part of it, has been deposited with the Bank. The columns of proportional figures enable us to trace this point. *Pari passu* the increases in the two columns, of the other deposits and of the other securities, balance each other.

Information at the moment would have been very valuable, as this would have helped to allay needless alarm. Suitable precautions against danger sometimes prevent that danger from becoming serious, and on such occasions it is very desirable that the extent of the precautions taken should be known.

The Other Securities.

The annual average of the "other" securities held by the Bank of England is given in Table 3, col. 26, p. 13. Col. 27, which accompanies this, shows the gradual growth of these. The amount was, roughly, three times as large in 1900 as it was in 1844. I have not thought it necessary to tabulate the Government securities held by the Bank, which are at the present date of writing (November 26th, 1902) about £35,700,000, being :—

Government Debt and other Securities in Issue	{ £11,015,100
Department	7,159,900
	18,175,000
Government Securities in Banking Department	17,512,457
	£35,687,457

The "other" securities in the Issue Department are included in this statement, since these are Parliamentary securities, like the "Government debt." These have increased from £2,984,900 in 1844 to £7,159,900 in 1902, the increase arising from the additional amount of note issue allowed to the Bank on securities through the contraction of the English country note circulation. This subject, the importance of which is scarcely generally recognised, is referred to in Chapter XXI., p. 217. Col. 20, Table 3, contains only the "other" securities held in the Banking Department. Little is now known as to the details which make up these securities, but the bills discounted by the Bank and the temporary advances are included among them. More information on these heads was given.

up to the year 1875. I have tabulated this information in cols. 28, 30, and 33 of Table 3, p. 14. Col. 28 shows the amount of the "other" securities which would remain after deducting the bills discounted and the temporary advances from the total; and col. 29 gives the corresponding proportion for each year from 1844 to 1875. More than half the "other" securities thus appear always to have been of a fixed character during the periods over which our information extends. Col. 30 shows the annual average of bills discounted, and col. 33 the annual average of the temporary advances made by the Bank. The amount of bills discounted shown in col. 30 has, at times, been large, and it has fluctuated greatly. It will be seen that the largest amounts were in the years when pressure on the money market was the highest, as in 1846, 1847, 1857, 1860, 1864, 1865, 1866. To facilitate examination into this point, and for convenience of reference, the annual average of the minimum rate of discount has been given in col. 46, Table 3, p. 15. The rate charged at the Bank is compared with the market rate in Table 4, p. 33. This subject is dealt with separately, as the statement of the market rate could not conveniently be brought into the analysis of the accounts of the Bank. When the rate of interest has been quite low, as in 1844, 1849, and 1850, the amount of bills discounted was small. It will be seen from Table 4 that during these years the market rate dropped distinctly below the Bank rate, and those who required discounts naturally obtained the accommodation they needed elsewhere. In the last two years for which the information can be given—1874 and 1875—the average amount was close to £4,500,000.⁹ It would appear that this branch of the business of the Bank has not increased in the same degree as the deposits have done. The statement in col. 32, p. 14, supports this impression. It shows the proportion which the bills discounted held to the total of the other securities. Only in two years during the period in which this point can be examined into did the bills discounted amount to more than half of the total of the securities. The proportion in the last year for which the information was given was less than a quarter of the whole amount of the securities held. This subject will be dealt with further on, when the analysts of the accounts

CH. II] A MORTGAGE OR BILL OF EXCHANGE

of the other great banks of Europe is proceeded with in Chapters XV. p. 140, XVI. p. 154, XVII. p. 174, XVIII. p. 181, and XX. p. 203. Col. 33, p. 14, shows the annual average of temporary advances. These, it appears, have fluctuated very considerably. It is difficult, without the aid of information on the part of the Bank, to form any distinct idea of what the amount may be now, but the probability is that it is now occasionally far larger than it was twenty-five years since. It is much to be regretted that the statement given in the table cannot be continued to the present time, and that information on this point and as to the amount of bills discounted is not supplied now. These are the only items in the account of the Bank in which any "fluidity" can exist. The remainder of the other securities held are believed to be principally debenture stocks of the great railway companies of the country and stocks of the large municipal corporations. Of "other" securities there were held, on November 26th, 1902, in the Banking Department £30,378,633. On average the amount is now from about 29 to 32 millions, the difference between one week and another arising, probably a good deal, from alterations in the temporary advances.

Little is known as to the details, but the description given in Mr. Thomson Hankey's book on *The Principles of Banking*, published 1867, may apply. Mr. Hankey was Governor of the Bank some years since. He possessed great natural shrewdness and was a first-rate man of business. He criticises, in *The Principles of Banking*, the classes of securities which a banker should hold, and remarks that "a relative of mine, C. Poulett Thomson, many years since used to say to me that nothing was easier to conduct than the business of a banker if he would only learn the difference between a mortgage and a bill of exchange. This saying may appear absurd, but I believe it is full of wisdom." Mr. Hankey applies this principle to bills of exchange; he means by it to discriminate between those bills which are based on current transactions and naturally, as it is said, "turn themselves into money," and those bills, such as the acceptances of contractors and others, which, though they no doubt will eventually be paid, may require a fresh loan to be made to continue them. The principle which Mr. Hankey applies is the right principle to act on,

when bills are offered for discount. It would be interesting to learn what proportion of the securities held by the Bank are now bills of exchange, short loans, or debenture and municipal stocks, "mortgages" according to Mr. Haigey's definition.

These, though admirable securities from an investor's point of view, are not those which are usually held to be suitable for bankers to place any large part of their money in.

Average of Coin and Bullion.

The yearly averages of the coin and bullion held in the Issue Department are given in col. 9, p. 11. A column with proportional figures, No. 10, follows, which gives the proportion of the coin and bullion held to the amount in 1844. The fluctuations have been considerable, and the increase not so large as in the deposits and the reserve. The amount in several years—as in 1847 and 1848, during the years 1854 to 1857 inclusive, in 1861, and in 1863 to 1865—was smaller than in 1844. It has not been till comparatively recently, in 1876—and especially from the year 1894 onwards—that any marked increase has taken place. The position of the Bank of England in respect to the gold bullion imported into this country is peculiar. The Act of 1844 declares in the 4th section that, after the date when that Act came into operation, "all Persons shall be entitled to demand from the Issue Department of the Bank of England Bank of England Notes in exchange for Gold Bullion at the Rate of Three Pounds Seventeen Shillings and Ninepence per Ounce of Standard Gold." Hence by far the greater part of the gold brought into the country makes its way automatically to the Bank, and the amount held there doubtless represents at times rather the convenience of the importer than the requirements of the Bank.

What happens when the Bank buys gold is usually this. A bullion dealer brings bar gold. An advance is made upon it, pending assay, by the Issue Department. The dealer's account in the Drawing Office—he is sure to have an account, though it is not essential to the transaction—is credited with the amount, and notes to the same sum are transferred from the Issue Department to the Banking Department. After the assay the exact value of the bar gold is calculated at standard fineness,

CH. II] COIN AND BULLION—RATE OF DISCOUNT

and the balance due to the dealer is dealt with in the same manner as the original advance. In the Issue Department the gold held and the notes issued are increased, in the Banking Department the drawing accounts and the reserve are increased. Practically all gold brought to the Bank in whatever form is paid for by the Issue Department in notes. The Act of 1844 places no limit on the issue of notes against gold: in other words, the Bank is empowered by that Act to issue notes against gold at the rate of 77s. 9d. per ounce standard without any limitation. A further amount of specie, gold and silver coin, is held in the Banking Department, besides the bullion in the Issue Department. This, except in the years 1867 to 1869, and 1878 to 1881, never exceeded a million regularly till about the year 1885. For the years 1893 to 1900 the amount on average has exceeded two millions. The specie thus held is included in the statement of the reserve, Table 3, col. 21, p. 13, being in that case added to the notes held by the Bank, col. 7, and also in the amount of the total bullion held, col. 41, p. 15, being in that case added to the coin in the Issue Department, col. 9, p. 11. The manner in which the accounts of the Bank are divided between the Issue Department and the Banking Department has rendered it necessary to make the statement in this form, in order to show both what the amount of the reserve is, and the total amount of bullion and specie held.

Col. 43, p. 15, shows the proportion of the total specie and bullion to the total liabilities—that is, to the deposits and the Bank post bills. As a rule the specie and bullion are less in amount than these, the proportion being from 65 per cent. to 81 per cent. in the years from 1895 to 1900. There were two years, 1844 and 1852, in which the specie and bullion held were larger in amount than the liabilities, being in the proportion of 103 and 102 respectively. The figures for these two years are therefore printed in a thick type to call attention to this point. Col. 44, p. 15, shows the proportion of the total specie and bullion to the notes held by the public. The proportion of the cover in metal to the notes in the hands of the public has rarely for the last twenty years been much less than 90 per cent. There have been several occasions in recent years—in 1876, 1879, 1880, and from 1893 to 1900—in which

the specie and bullion¹ held have been larger in amount than the notes in circulation. For these years also the figures have been printed in a thick type—as 104 for 1876. Col. 45 shows the proportion of the bullion to the liabilities and the notes in the hands of the public united. This has been, on average, for many years more than 40 per cent. of the amount of the liabilities and notes held by the public.

With respect to the “notes issued,” the proportions issued against securities and against bullion are shown in cols. 5 and 6, p. 11. The average issue against bullion has increased of recent years.

Average Rate of Discount.

The annual average minimum rate of discount charged by the Bank is shown in col. 46, p. 15. This subject is dealt with more fully in Chapters V. and VI. pp. 48, 55, which discuss the relations between the rate of discount and the reserve of the Bank, also in Chapters X. and XI. pp. 95, 106, on the variations in the rate from 1844 to 1900, and some of the causes which influence it; and in Chapters XIX. and XX. pp. 190, 203, on the fluctuations in the rate charged by the Bank compared with other business fluctuations, with some remarks on the rate of discount of the Banks of England, France, Germany, Holland, and Belgium.

To illustrate the increasing divergence between the market rate and the Bank rate, Table 4, p. 33, is given showing the annual average of the Bank rate and of the market rate for high-class bills for 1845–1900, and the differences between the two rates. Down to 1870 the market rate was occasionally above the Bank rate. Since that time, however, the market rate has been constantly and, on average, increasingly below the Bank rate charged in London. At its provincial branches the Bank works at the ordinary local rate current. Indeed complaints are made that the Bank will at times discount below the rate usual in those places—complaints which are not to be wondered at considering the large amounts placed with the Bank of England by bankers, who naturally object to competition of this description, carried on against them with their own money.

TABLE 4.

Annual Averages of Bank Rate and of Market Rate High-Class Bills for the years 1845-1900, showing when the Market Rate was above or below the Bank Rate.

Year.	Annual Average Bank Rate.	Proportion of Annual Average Bank Rate to 1845 (1845=100).	Annual Average Market Rate High-Class Bills.	Proportion of Annual Average Market Rate to 1845 (1845=100).	Difference between Market Rate and Bank Rate.		Year.
					Market Rate. More.	Market Rate. Less.	
1845	£ s. d.	£ s. d.	£ s. d.	100	6 4	—	1845
1846	2 13 8	100	3 0 0	100	8 0	—	1846
1847	3 6 6	124	3 15 0	125	—	—	1847
1848	5 3 6	192	5 17 6	195	14 0	—	1848
1849	3 14 5	139	3 5 0	108	—	0 9 5	1849
1850	2 18 7	109	2 5 0	75	—	0 13 7	1849
1851	2 10 1	93	2 5 0	75	—	0 .5 1	1850
1852	3 0 0	112	3 0 0	100	—	—	1851
1853	2 3 0	80	1 17 6	62	—	0 3 6	1852
1854	3 13 10	138	3 10 0	117	—	0 3 10	1853
1855	5 2 3	190	4 17 6	162	—	0 4 9	1854
1856	4 17 10	181	4 10 0	150	—	0 7 10	1855
1857	6 1 2	225	5 10 0	183	—	0 11 2	1856
1858	6 13 3	248	6 15 0	225	1 9	—	1857
1859	3 4 7	120	2 15 0	91	—	0 9 7	1858
1860	2 14 7	102	2 10 0	83	—	0 4 7	1859
1861	5 5 4	196	5 0 0	167	—	0 5 4	1861
1862	2 10 7	94	2 5 0	75	—	0 5 7	1862
1863	4 8 2	164	4 5 0	142	—	0 3 2	1863
1864	7 8 0	276	7 0 0	233	—	0 8 0	1864
1865	4 15 4	177	5 6 7	177	1 3	—	1865
1866	6 19 0	259	6 8 2	213	—	0 10 10	1866
1867	2 10 9	94	2 13 4	88	2 7	—	1867
1868	2 1 11	77	2 5 9	76	3 10	—	1868
1869	3 4 2	110	3 7 5	112	3 3	—	1869
1870	3 2 0	110	3 5 7	109	3 7	—	1870
1871	2 17 8	107	2 17 10	96	0 2	—	1871
1872	4 2 0	153	4 1 9	136	—	0 0 3	1872
1873	4 15 10	177	4 14 0	157	—	0 1 10	1873
1874	3 13 10	138	3 11 1	118	—	0 2 9	1874
1875	3 4 8	120	3 2 9	105	—	0 1 11	1875
1876	2 12 1	97	2 5 3	75	—	0 6 10	1876
1877	2 18 0	108	2 12 5	87	—	0 7 7	1877
1878	3 15 8	141	3 11 11	120	—	0 3 9	1878
1879	2 10 4	93	2 2 9	71	—	0 7 7	1879
1880	2 15 4	103	2 10 7	85	—	0 4 9	1880
1881	3 10 0	130	3 1 1	102	—	0 8 11	1881
1882	4 2 8	154	3 11 1	118	—	0 11 7	1882
1883	3 11 4	133	3 4 4	107	—	0 7 0	1883
1884	2 19 1	110	2 11 6	86	—	0 7 7	1884
1885	2 17 7	107	2 8 0	80	—	0 9 7	1885
1886	3 1 0	114	2 6 8	78	—	0 14 4	1886
1887	3 7 0	125	3 12 11	88	—	0 14 1	1887
1888	3 5 11	123	2 10 7	85	—	0 15 4	1888
1889	3 10 11	132	2 10 11	95	—	0 14 0	1889
1890	4 10 5	168	3 17 7	128	—	0 12 10	1890
1891	5 2	121	2 15 4	92	—	0 9 10	1891
1892	2 10 7	94	1 15 2	59	—	0 15 3	1892
1893	3 1 0	116	2 6 3	47	—	0 14 9	1893
1894	2 2 3	79	1 3 9	39	—	0 18 6	1894
1895	2 0 0	75	0 19 2	32	—	1 0 10	1895
1896	2 9 8	93	1 11 5	52	—	0 18 3	1896
1897	2 12 8	78	1 18 6	64	—	0 14 2	1897
1898	3 4 10	120	2 12 11	88	—	0 11 11	1898
1899	3 15 4	140	3 5 0	108	—	0 10 0	1899
1900	3 19 6	148	3 24 2	123	—	0 5 4	1900

CHAPTER III

THE BALANCES OF THE LONDON BANKERS WITH THE BANK OF ENGLAND

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THE subject of the balances which the bankers keep with the Bank of England requires some further examination. The amounts of these cannot be carried later than the year 1877, as the publication of the figures ceased with the close of that year. It is much to be desired that the publication of this information should be resumed, but meanwhile all that can be learned from the consideration of the manner in which these balances have accumulated must be obtained by the examination of what has already been made public. This will be found of service in enabling us to understand better what is the position of the reserves held by the banks of this country. Some further remarks on this point will be found in the next chapter. There has never been any distinct arrangement made between the Bank of England and the bankers as to the

manner in which these balances should be dealt with. It might, generally speaking, be said that they were held on the basis of the ordinary arrangement between a banker and his customer as to a credit account—that the balance should be withdrawable whenever required.

The annual averages of the bankers' balances for the period that they have been made public are given in col. 19 of Table 3, p. 13. For convenience of reference they are repeated here.

TABLE 5.
Annual Averages of London Bankers' Balances with the
Bank of England, 1844-1877.

	£.	Proportion of London Bankers' Balances to 1844 (1844=100)
1844	997,000	100
1845	1,256,000	128
1846	1,558,000	160
1847	1,467,000	150
1848	2,359,000	241
1849	2,131,000	218
1850	1,656,000	170
1851	1,666,000	170
1852	3,184,000	326
1853	2,259,000	231
1854	2,692,000	275
1855	3,065,000	313
1856	3,032,000	310
1857	3,274,000	335
1858	4,639,000	475
1859	4,256,000	435
1860	4,283,000	438
1861	4,185,000	428
1862	5,030,000	515
1863	4,726,000	484
1864	4,899,000	502
1865	5,038,000	512
1866	6,259,000	<u>6</u>
1867	6,680,000	685
1868	6,801,000	696
1869	6,479,000	663
1870	6,618,000	678
1871	8,390,000	859
1872	7,609,000	778
1873	8,586,000	878
1874	8,341,000	854
1875	10,324,000	<u>1,033</u>
1876	11,851,000	1,212
1877	9,543,000	976

There were many occasions, principally between 1857-77, on which the balances of the London bankers with the Bank were fully as large as, and some on which they were distinctly larger than, the reserve of the Bank of England. Thus:—

On 11th November, 1857, the Bank of England reserve was	£1,462,000
and the London bankers' balances	4,649,000
On 16th May, 1866, the Bank of England reserve was	1,203,000
and the London bankers' balances	7,980,000
On 31st October, 1877, the Bank of England reserve was	9,678,000
and the London bankers' balances	10,069,000

The last statement shows in a very remarkable way the manner in which the balances of the London bankers have continued to expand. October, 1877, was a very severe time of pressure, and the amount of the bankers' balances then shown was by no means the largest in the return of that year, but it still largely exceeded the amount attained during the panic of 1866.

The details of the dates when the bankers' balances exceeded the reserve are as follows:—

NUMBER OF TIMES WHEN THE BANKERS' BALANCES EXCEEDED THE RESERVE OF THE BANK OF ENGLAND IN THE YEARS BETWEEN 1844 AND 1877.

1847	.	.	.	.	.	1
1856	.	.	.	.	.	2
1857	.	.	.	.	.	7
1858	.	.	.	.	.	2
1865	.	.	.	.	.	1
1866	.	.	.	.	.	20
1871	.	.	.	.	.	4
1872	.	.	.	.	.	1
1873	.	.	.	.	.	6
1874	.	.	.	.	.	6
1875	.	.	.	.	.	9
1877	.	.	.	.	.	2
						61

Divided into four groups of eight years each, the results are as follows:—

NUMBER OF TIMES WHEN THE BANKERS' BALANCES EXCEEDED THE RESERVE OF THE BANK OF ENGLAND.

Years	1844-53	.	.	.	.	1
"	1854-61	.	.	.	.	11
"	1862-69	.	.	.	.	21
"	1870-77	.	.	.	.	28
						61

The reader should compare this statement with the one showing the proportion borne by the bankers' balances to the reserve, given in cols. 19, 20, and 25 of Table 3, p. 13, and the statements on p. 35. It is clear that the tendency of the bankers' balances to increase is entirely independent of years of panic or extraordinary pressure, and is the result merely of the natural growth of the business. Though no absolute panic occurred during the years 1870-77, there was grave anxiety at times, some of the causes of which are mentioned on p. 25, and the balances of the London bankers were more often larger than the reserve of the Bank of England during those eight years than in any of the similar groups of years which preceded.

These figures also mark very distinctly that the growth of the balances of the London bankers increased, in the period during which they were published, progressively in a larger proportion than the reserve of the Bank of England. There is no doubt that they have continued to increase, and in a larger proportion, up to the present time. In an ordinary way people who read the weekly accounts of the Bank of England, which appear in the newspapers every Friday morning, do not remember this point; it will therefore be advisable to show how large a part of the deposits of the Bank consists of the balances of the London bankers.

As an illustration, the account for the week ending Wednesday, December 26th, 1877, is shown on p. 38. It has been selected as the most recent example which can be given of the proportion which the balances of the London bankers bore to the total deposits of the Bank up to the time when our knowledge of this matter ceases. The publication of the amounts of the London bankers' balances has not been continued since the end of December, 1877.

If the amounts held by bankers with the Bank, both in London and the provinces, were published every week, it would then be clear what the reserve really consisted of; that is to say, whether it consisted of money belonging to the Bank of England itself, and kept to meet the demands which may at any time be made on it, or whether it consisted of the reserves of the other banks of the country, placed by them with the Bank of England for safe custody. If in the pub-

lished accounts of the Bank the amount of the balances of the bankers were deducted from the ordinary deposits, and a corresponding deduction made from the reserve, as in the form of account given below, it would become obvious at once that, on the 26th December, 1877—the latest statement respecting which these details are available—the deposits of the public with the Bank of England, instead of being 20 millions, were 11 millions, that the reserve available against the ordinary as distinguished from the banking portion of the liabilities was less than 3 millions instead of $11\frac{1}{2}$ millions, and that the proportion of this reserve to the liabilities on deposits other than those derived from the bankers, instead of being $57\frac{1}{2}$ per cent., as the usual statement makes it, was only $23\frac{1}{2}$ per cent.

BANK OF ENGLAND. ACCOUNT FOR THE WEEK ENDING ON WEDNESDAY, THE 26TH DAY OF DECEMBER, 1877. Arranged so as to Show the Proportion of the Reserve to the Liabilities after Deducting the Balances of the London Bankers from Both.

ISSUE DEPARTMENT			
Notes issued	£ 38,231,530	Government debt	£ 11,015,100
		Other securities	3,984,900
		Gold coin and bullion	23,231,530
<u>38,231,530</u>			<u>38,231,530</u>
BANKING DEPARTMENT.			
Proprietors' capital	£ 14,553,000	Government securities	£ 13,383,176
Rest	3,073,356	Other securities	18,441,368
Public deposits	5,942,869	Notes	11,433,545
Other deposits	20,183,367	Less per contra	8,695,000
Less bankers' balances } 8,695,000			
	<u>11,488,367</u>		<u>2,738,545</u>
Seven day and other bills	306,077	Gold and silver coin	800,540
	<u>35,363,629</u>		<u>35,363,629</u>

Proportion of reserve to liabilities, shown in ordinary form, $57\frac{1}{2}$ per cent.

Proportion of reserve to liabilities, after deducting bankers' balances from both, $23\frac{1}{2}$ per cent.

It was mentioned above that the week's account of the Bank of England selected here as an illustration is merely taken as being the most recent in reference to which this comparison can be made, and not for any other reason. It would

have been easy to select the accounts of other weeks, in which the proportion borne by the London bankers' balances to the deposits generally, and also the proportion of the London bankers' balances to the reserve, would have been considerably larger than in the one chosen, and consequently the proportion borne by the reserve to the remainder of the liabilities would have been far smaller. Or again, it would have been easy to have taken a week's account in which the whole reserve was insufficient to meet the demands which might be made by the London bankers alone. The account of a week has been taken which is not an extreme instance in any way. If the ordinary liabilities of the Bank were distinguished from those incurred to its banking customers, attention would be more readily drawn to those occasions on which the bank reserve of the Bank of England was insufficient to meet the balances of the London bankers.

But whether the accounts of the Bank of England are ever again published in such a manner as to show these details or not, one thing is clear—that the balances kept by other bankers with it cannot really form part both of its own reserve and of the reserves of the other banks as well. If these amounts are employed for the one purpose, they cannot be available at the same time for the other. These balances are the ultimate reserve of all the banks in the kingdom. There is no other country in the world, of which the banking system is known, in which the reserves of the banks are loaned out in the manner in which they are in this country. This has been the case here ever since banking in the United Kingdom assumed its present form. The practice has, therefore, the plea of usage in its favour, and the plea of usage is an extremely strong one; but it is not one which should be followed implicitly when there are good reasons for a change. It might be undesirable to say that these balances should never be loaned out; but it is clear that they form that portion of the resources of the Bank which should be employed with the utmost caution.

The balances of the London bankers with the Bank of England are included among its other liabilities. In another sense also, while these balances are practically, as previously mentioned, of the nature of "till money"—as far as transactions

between the banks who own them are concerned—they form part, and by no means an unimportant part, of the general banking reserve of the country. These balances are the only reserve of ready money kept by the bankers of the United Kingdom beyond the amount of cash in their tills. It is not meant, of course, by this to suggest the idea that they are by any means the only resources which the bankers of the country would have to fall back on in any time of pressure. The amounts held at "call," and the amounts readily available in other forms, are very large—far larger than any of the figures now before us for consideration. But, as far as actual hard "cash" is concerned, the balances at the Bank of England are the only source from which an immediate supply of "money" can be obtained by the bankers of the country to meet any immediate need beyond what they themselves hold in their own vaults. It is not by any means the whole of these balances which are available to meet such an immediate need. The bankers have to bear in mind that a "working balance" has always to be maintained against the demands which may arise on account of the clearing (see p. 22, and Chapter IV. p. 44). And to include the amounts which these balances represent among the reserves of the Bank of England, and also among the banking reserves of the country at large, is really to reckon them twice over. In order to illustrate this for the period over which information on the subject is available, namely from 1844 to 1877, a statement has been drawn up showing the proportion which the reserve would have borne to the liabilities if the bankers' balances had been deducted both from the reserve and the liabilities, and also of the proportion which the bankers' balances bore to the reserve. These show the position in which the Bank of England would have stood if the London bankers had held their own balances in Bank of England notes, or in gold in their own safes.

It has not been possible, in the space to which this statement is of necessity confined, to exhibit what the effect of making up the accounts of the Bank of England in this manner would have been on every weekly return of the Bank from 1844 to 1877; but the general effect is shown in cols. 24 and 25 of Table 3, p. 13. Col. 24 contains the proportion which the

average annual reserve of the Bank of England would have borne to the liabilities if the balances of the London bankers had been deducted from those liabilities and the same amount were deducted also from the reserve. Col. 25, p. 13, shows the proportion of the bankers' balances to the reserve. The gradual and progressive diminution in the proportion of reserve kept to the liabilities in general has been already noticed; but from the figures recorded in these columns we may see how much greater and more marked, especially in recent years, that diminution would have been, had the accounts of the Bank been made up in such a manner as to distinguish the ordinary from the special banking liabilities. The average reserve of the Bank of England would, if the bankers' balances had not been included in it, have been on average in 1875 but 6 per cent. of the liabilities, and in 1866 but 3 per cent. (Table 3, cols. 24 and 25, p. 13). We may thus see clearly how largely the reserve of the Bank of England is composed of money which is really also the reserve of other banks, and retained against other liabilities than those which appear in this account—liabilities which, of banks in the United Kingdom alone, are many times larger than those of the Bank of England, and have increased very rapidly in recent years, having been estimated in 1844 as about 70 millions, in 1856 as 200 millions, in 1866 as 350 millions, in 1873 as 800 millions, in 1902 as about 1,000 millions. From a banking position, there is no doubt economy in making the Bank of England keep the reserve of the bankers, but it is equally certain that, from a general point of view, the doing this tends to place the stress of every pressure which occurs always on one point—a point on which many and varied demands all concentrate—demands for domestic and foreign needs, the requirements for harvest wages and autumn holiday-makers in England, of farmers in Scotland, ~~or~~ dealers in Ireland, the requirements of great nations forming and increasing their gold circulations, the demands for gold for export as well as for the internal circulation of the country. Of these demands, those caused by the periodic fluctuations of the note circulation of the Scotch and Irish banks are specially linked through the provisions of the Bank Acts of 1844-5 with the fluctuations of the

reserve of the Bank.' This subject requires a more special treatment than can be accorded it here, and it is dealt with in Chapter XII., p. 112. The more general demands are referred to in Chapter XIV., p. 138, which describes the "Autumnal Drain" of specie from the Bank. Great unsteadiness in the value of money is the result. Several useful suggestions have from time to time been made on this matter, and by those whose opinions deserve careful consideration. But the *vis inertiae* which in this case would have to be overcome is a remarkably powerful force. It can only be hoped that those who feel the importance of the subject will keep it steadily before the public, till an arrangement is agreed to better suited to the necessities of the case than the present most inadequate method. I am glad to see the matter referred to in the paper on the Short Loan Fund of the London Money Market, read before the Institute of Bankers by Mr. J. Herbert Tritton, on February 5th, 1902. Much discussion will no doubt have to take place before anything practical is done, but keeping the subject thus before the minds of business men will assist in arriving at a satisfactory result. It is to be hoped that we may not require the experience of another panic, with all its miseries and all its losses the extent of which none except those who have experienced the real brunt of such a season of trial can appreciate, before a better arrangement is arrived at.

Still it is best to place on record some suggestions as to what might be done. If our banks were to keep their own reserves, and publish their accounts weekly or monthly, the reserves held would undoubtedly be much larger than they are now, and business would be on a far more solid footing and more even in its tenor. Such an arrangement is hardly likely to be arrived at, and the plan would be open to some objections. The banking business of the country has been carried on so long on the One Bank Reserve system that a great a change as this could not be lightly undertaken. But if the committee of the Clearing House were to publish the collective amounts of the bankers' balances with the Bank weekly, together with the statement of the Clearing House Returns, this might be useful. If the balances were sum-

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marised in one total the knowledge of the amount could be dangerous to no one, and would even diminish the risks to which we are exposed in any time of pressure. There is a great danger at such times to our highly complicated banking system from alarm among the ill-informed and ignorant. Their anxiety would be soothed by a knowledge of the large resources held by the banks; and to those who have the conduct of the business such information would be of signal service. A knowledge of the position of the shoals and breakers to be avoided in his course, and of the position of the channel through which he may steer his ship in safety, useful at all times to the pilot, is essential among the additional perils of the storm.

CHAPTER IV

THE BALANCES OF THE LONDON BANKERS WITH THE BANK OF ENGLAND. HOW FAR THEY FORM AN EFFICIENT RESERVE

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CONSIDERABLE information of a very interesting character as to the manner in which the balances of the London bankers with the Bank are regarded by the Bank directors, is given in some letters written by Lord Aldenham, then Mr. H. H. Gibbs, a well-known director of the Bank of England, published in an appendix to a book written by the late Professor Bonamy Price.* These letters form part of an animated and interesting correspondence between Lord Aldenham and Professor B. Price, on the Bank rate, the influx and efflux of gold, the "regulation of the currency," and other kindred subjects. It is not necessary to enter into the consideration of all these questions at the present time; we will content ourselves with examining mainly two points which are discussed in the letters, namely, the manner in which the Bank of England views the bankers' balances kept with it, and the proportion of these sums which they consider they may make use of in the ordinary way of business. The opinions of any director of the Bank, and especially of a past-governor of such experience and standing

* *Chapters on Practical Political Economy.* By BONAMY PRICE, Professor of Political Economy in the University of Oxford. London: C. Kegan Paul and Co., 1878.

as Lord Aldenham, are very valuable, and no apology is needed for quoting from a book which is open to the whole world to read. The correspondence at the point alluded to turns first on the question whether the custody of such large sums as the bankers keep on their accounts at the Bank of England may not cause some difficulty, or even danger, to the Bank. Lord Aldenham in referring to this, and to the fact that the bankers' account is really an extremely easy one to arrange for, commences by remarking that "next to the Government account, the account of the collective bankers is the most certain and the most intelligible. . . . We know of the bankers, better than of any account in our books, what is the minimum balance wherewith they can live. They must have x on their account (a quantity unknown to all but us), and $x+y$ therefore—never appears. But if $x+y$ is seen, then we know that y must remain untouched and uninvested; must, in fact, form an addition to our *reserve*; x is ours for profit *if we like to use it*, but y is ours only for safe custody. Where is the danger? On the other hand, the possession of that account is of the greatest importance to us, as affording the most perfect and accurate measure of how far the public can at all act independently of us." The italics are in the book quoted from.

In a later letter Lord Aldenham explains "that up to a certain point (x)," the normal balance of the bankers, was perfectly intelligible to the Bank; "(y), their abnormal balance, is an element of doubt." These remarks made by Lord Aldenham appear to confirm the advisability of the step which has been recommended above, namely, that the bankers should decide that everything which they keep in hand beyond their working balances should not be placed to the credit of their clearing accounts with the Bank, but should be retained weekly under a separate heading, and not appear in the statements of the Bank. Such a separation would mark out at once what was really "reserve," and what was only nominally "reserve." The bankers' balances up to the point which Lord Aldenham speaks of, and which may approximately be estimated from the outside, are really not reserves to them at all; they are merely "till money" on a scale commensurate with their operations,

relatively, that is, to the demands which may be made on them at any moment in settling the clearing balances. This would be seen immediately if business in the city were conducted now as it used to be up to the date when the clearing demands were still settled by the payment of the actual notes, not by means of a cheque drawn on the Bank of England. No one could call the sums held in bank notes in the safe, or the drawer near the counter, for that purpose, a "reserve." The notes were merely "till money," and "till money" the amounts which represent them still remain, though for their own convenience the banks have advanced a step beyond their primitive practice and have agreed to divest themselves of the actual custody of the notes, and to keep the money itself in Threadneedle Street. It is impossible to call the sums thus held by the Bank, which represent cash merely held to meet immediate claims on the bankers, a reserve. Nor is anything beyond these sums, the clearing balances as they may be described, of much use to the Bank of England. The bankers have frequently large sums on their accounts beyond what they require for settling the daily clearing demands. These sums, and they are often very large, are a real reserve to them. But in consequence of uncertainty as to the length of time this money may remain with the Bank, it is to be supposed that the directors do not feel justified in employing the part of the sum which exceeds the "minimum balance" in the same manner as they do the part which they know must remain fixed. This amount, Lord Aldenham says, and truly, with a most proper feeling of the line of action the Bank should always take, "is ours only for safe custody." Now if there is an axiom to be observed in banking, it is that things should always be regarded as they really are. To have a balance in your hands which you cannot use is a hindrance to business, and not a help. The bankers' balances in 1876 fluctuated nearly ten millions between their lowest and their highest point, and as the lowest may be taken as approximating to the necessary amount which has always to be maintained, it is clear that a very serious responsibility, without any corresponding advantage, must have been imposed on the Bank. To have placed these sums under a separate heading would, by Lord Aldenham's own showing, have been

no detriment to the Bank, while the doing so would have tended to the increase of that comparatively small amount of "unused money," the smallness of which is so constant and so real a danger to business in this country.

After all, the point perhaps of most importance in the decision of the Bank directors on the subject of their discounts, which is dealt with in the next chapter, is how far their present intention of governing their dealings in the matter of discounting by the strict rules of supply and demand can be reconciled with their old practice of protecting the reserve when needful, irrespective of the rate of interest ruling in the market. The two things seem hardly capable of being reconciled with each other. The market rate for "money" may be very low, and yet a demand for bullion for export may set in which may require that the rate should be raised. In circumstances like these—and they may occur any day—which course are the directors to follow? It cannot be doubted that the Bank will be faithful to its old traditions and protect the reserve. But considering the vast sums continually floating in the outside market, and the sudden and large demand which may arise at any time out of exchange operations, the Bank might in all fairness call on those who have so large a share in regulating the outside market to co-operate with it in providing a proper reserve to meet the demands which these operations are at times certain to entail. One thing is clear, that the fixing the rate of discount, and the custody of the reserve which is influenced by that rate, should be in the same hands; and if the rate fixed by the other banks influences the market more than it used to do, as appears to be the case,—then the responsibility of providing an adequate reserve should be shared between them and the Bank of England.

CHAPTER V

THE PUBLISHED RATE OF DISCOUNT OF THE BANK OF ENGLAND

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THE directors of the Bank made, in February, 1878, a change in their mode of business with respect to discounts, by announcing that they would no longer feel bound to adhere to the rule of maintaining a fixed minimum rate as closely as they had done. This has had in some ways a considerable effect both on their own transactions and on the money market at large, and is not unlikely to have more in the future.

To investigate the reason for this change it is needful to go back^g some years, and to trace the practice of the Bank with regard to discounts from the year 1844. The most authentic record of the history of this is to be found in the reports and evidence given before Parliamentary Committees, as the opinions of those who appeared before those Committees are preserved there in their own words.

Thus the Report of the Committee of the House of Lords on Commercial Distress, Session 1847-8, contains a historical statement of great value on these questions. The report of the corresponding Committee of the House of Commons, also

dated in 1848, was referred to in the opening chapter of this volume. In some respects the report of the House of Lords is the more weighty document. It was deemed of so much importance that it was reprinted in 1857. From it may be learned that for more than a century, down to the year 1839, the Bank rate never exceeded 5, nor fell below 4 per cent. During the pressure of 1839 the rate was raised for some months to 6 per cent., but it was reduced to 5 per cent. in January, 1840, and remained at 4 or 5 per cent., as before, till after the Bank Act was passed. At that date the market value of money was, and had been for some time previous, considerably below the Bank rate, so much so, in fact, that the Bank was entirely "out of the market." According to the evidence of Mr. H. J. Prescott, the deputy-governor of the Bank at the time, the Bank did not then hold "above two or three hundred thousand pounds of discounts in London, the market rate being at that time not above 1 $\frac{3}{4}$ to 2 per cent." The actual sum is mentioned as being £113,000 in August, 1844, when the Bank rate was reduced to 2 $\frac{1}{2}$ per cent.

This was the date at which the "new system of discounting," as Mr. Prescott termed it in his evidence, was adopted by the Bank. The novelty of the system consisted in the fact that the Bank commenced from the autumn of 1844 to adapt its own rate to the market rate, and with such effect that the governor of the Bank, Mr. James Morris, in giving evidence on the same occasion as Mr. Prescott, considered that by 1848 the Bank held half the discounts then in the market. "I consider," were Mr. Morris's words, "that in London the discounts by other parties, the great discount brokers and bankers, must be equal to the amount which the Bank holds under discount." And, in answer to another question, Mr. Morris added, "I think that the discount brokers and other parties afford altogether to the public an amount of discount equal to that afforded by the Bank, except in times of extreme pressure."

These observations made by the governor and the deputy-governor of the Bank in 1848 show what the position of the Bank of England was towards the outside market some fifty years ago. They are supplemented and supported by the

remarks made by Mr. Samuel Jones Lloyd (afterwards Lord Overstone) at the same date, when examined before the "Committee on Commercial Distress" of the House of Commons. Mr. Lloyd's evidence was to the effect that the Bank had at that time become more of a competitor in discount business than formerly, owing to the fact that it made its own rate conform to the fluctuations in the market rate more closely than it used to do. "The Bank rate," Mr. Lloyd said, "formerly was 4 or 5 per cent.; if the market rate of interest was below 4 per cent., the Bank ceased to discount till it got up again to that point. But in point of fact, latterly the discount department has become a very active department of the Bank." Mr. Lloyd's evidence thus confirms the statement which Mr. Morris had made.

This describes the position of matters in 1848. No great alteration had occurred in it for nine or ten years, when the Select Committees of the House of Commons of 1857 and 1858 collected further evidence on the working of the Bank Acts. Mr. David Barclay Chapman was examined before the Committee of 1857; by his evidence it appears that the rate charged by the Bank of England in 1857 was not, as it is at present, almost invariably above the outside rate, but that it worked more nearly in unison with it, being sometimes a little above and sometimes a little below the market rate. When the Bank rate was very low the market rate was a little lower, and when the Bank rate was very high the market rate was a little higher. The evidence of Sir David Salomons before the Committee of 1858 was to the same effect as that of Mr. Chapman, and showed that the Bank rate conformed fairly closely to the market rate at that period. The question asked by Mr. Hankey and answered by Sir D. Salomons on the subject was as follows:—"Do you believe that the Bank of England has generally led or followed the current rate of interest in the London market?—I think they sometimes have led and sometimes have followed; generally they are supposed to follow, but I think that sometimes they have led" (1199). In 1857, however, the first signs of divergence between the Bank rate and the market rate appear to have occurred. Sir D. Salomons stated that in December, 1857, the London

and Westminster Bank had deviated from the principle of working in accordance with the Bank. His words were: "We at that time altered our system. We do not now follow so closely the Bank rate; we have, as far as we can, broken from it, adopting what may be called an expedient rate, not following the Bank rate so closely as hitherto we have done" (1145). (Evidence before Select Committee of House of Commons on the Bank Acts, 1858.)

These statements of Sir David Salomons show the direction in which matters were tending in his time. The facts are shown in Table 4, p. 33. Gradually it became a question whether the publication of a fixed rate by the Bank of England had not become as much an anachronism as a permanently fixed rate was in the year 1844. When a fixed rate was published by the Bank, people could tell at once whether they could get their business done cheaper elsewhere, and in this period of sharp competition, such knowledge is enough of itself to deter them from coming to a bank, the rate of which they know already. The Bank lost that power of delicate adjustment of its position to the precise needs of the moment, which is essential to the maintenance of business. It cannot, as it were, feel the pulse of its customers as closely as if its rate were not advertised; it cannot follow so well the distinctions made between one class of paper and another as it could—did a hard and fast rule not exist.

When, in February, 1878, the Bank announced, as mentioned above, that it would no longer feel bound to discount at the published minimum rate, it made a further and perhaps more important alteration by letting it be known that it would make advances to the bill-brokers when desired, reverting in this to its practice before March, 1858.

This was extremely convenient for the bill-brokers, and is understood to have been used more frequently and for larger sums since the further change of the Bank's practice in 1890. Previous to July, 1890, the Bank made advances to bill-brokers and discount companies or bills, but would not discount the bills outright. In 1890 the Bank announced that the brokers, etc., would be allowed to offer for discount at not less than the published rate, bills not having more than fifteen days to run.

The currency of the bills has since been extended by degrees to sixty days. When a banker requires a broker to repay him his "Call-Money" the only source from which the broker can obtain the requisite supply is from the Bank of England. The broker cannot expect to be able to obtain the sum in the open market, as all available resources there are, as a rule, employed up to the hilt. He therefore goes to the Bank of England, pledges what are virtually the banker's own bills, and thus is enabled to repay the banker. These bills may have but a very few days to run, but the broker cannot wait till they have matured. The banker must have his money, and the broker must find it. The broker has no reserve of unemployed money. He cannot afford to keep a reserve, as he allows interest at a higher rate than the banker does on all his deposits. Hence a demand for a comparatively small sum makes a stir, disproportionately large, in the money market.

This arrangement is not favourable to the quiet working of the money market. If the custom generally followed on the Continent prevailed in this country, and bankers laid themselves out to discount freely for their customers, feeling at liberty to re-discount these bills whenever needed with the Bank of England, all the work of intermediaries would be saved, and business would be on a sounder foundation. It is the custom of banks in foreign centres, as at Berlin, to re-discount thus habitually. The arrangement is a good one in many ways; it helps the central bank to keep in touch with the smaller business houses which surround it, and it enables those houses to carry on their business with perfect smoothness. The smaller banks in foreign business centres re-discount as a matter of course with the central bank, which is thus supplied with a large mass of perfectly dependable and rapidly maturing paper; but in London if it were known that a bank, even of the highest standing, habitually re-discounted with the Bank of England, it would at once be held to be "in extremis." In times of panic and peril such things, of course, have to be done, but in the ordinary way of business no London banker ever dreams of such a thing. The result is that while some London bankers discount, and to large sums for their

customers, others do not do so, and the customers, many of very high standing, go to the bill-brokers.

There are several causes which have led to this. In the first place the habit of a banker's discounting for his customers has been to a certain extent discontinued, if not dropped, while side by side with this the bill-broker has stepped in and found his opportunity. He can be depended on with certainty, while the reply of the customer's banker may be that he is "not discounting to-day." People do not like being met with this kind of answer from their bankers. They are far more independent than they were some twenty or thirty years since. They know that the brokers are always ready to discount, and will quote them the exact market price. The banker may not always follow this as closely as the broker. A very fractional difference nowadays is sufficient to send a man from his banker to the broker. The broker discounts the bills with money which belongs to the banker, who afterwards very probably receives the paper as "security bills" from the broker.

The London bankers have, to a great extent, built up the business of the bill-brokers by the course which they have taken of entrusting large sums to their care. The bankers have spared themselves some considerable labour by this, and though they have made a smaller profit from their transactions, they have gained by the being able to devote a closer attention to their business generally. There are also, it must be remembered, the banks outside the business centre of the City, who hold large sums of money without possessing such means of employing them as the City banker does. Their requirements have also to be considered. The present division of the work of our money market between bankers and bill-brokers appears likely to continue. While on the one hand there is an increasing tendency towards the exclusion of intermediaries in business, there is on the other a tendency almost equally strong towards specialisation. The bill-broker devotes his whole time and thought towards his subject; he knows not only the character and standing of the houses whose acceptances he is willing to take admirably well, but he becomes able to prognosticate very closely and with great shrewdness the future position of the money market, and arranges his dealings accordingly. He

keeps his eye fixed not only on the position of affairs in this country, but on that in other countries as well. A knowledge of the course of the foreign exchanges is a great assistance to success in the business. But the practice of the bill-broker to work without a reserve necessarily tends to focus any large demand for money immediately on the Bank of England.

The description of their business given by Mr. Samuel Gurney before the Committee of the House of Lords on Commercial Distress, Session 1847-8, and the Committee of the House of Commons also on Commercial Distress, 1848, and by Mr. David Barclay Chapman before the Committee of the House of Commons on the Bank Acts, 1857, shows how different this was from the business of the bill-broker at the present time. Both Mr. Gurney and Mr. Chapman were partners in the house of Overend and Gurney at the time of its highest prosperity. The great development of the business of bill-brokering, money dealing, as it more properly should be called, has taken place since that time.

Meanwhile, the competition for bills in the discount market is beyond question extremely sharp at the present day. There are several large joint stock companies formed for the purpose of carrying on this class of business, and the number of private firms engaged in it seems also to grow. Various circumstances—the increasing supply of money, the power of dealing by means of telegraphic transfers, and other business arrangements—have all tended to limit the supply of bills, which is distinctly smaller now in proportion to the supply of money than it was thirty or forty years since, whilst the competition for those bills which are in the market is closer than ever.



CHAPTER VI

THE PUBLISHED RATE OF DISCOUNT OF THE BANK OF ENGLAND AND THE RESERVE

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As mentioned in the last chapter, the Bank of England announced in February, 1878, that it would, when occasion required, discount for those of its customers who transacted business exclusively with it, at a rate lower than that advertised as the official rate. One result of this has been that the Bank rate is less a real guide to the value of money than it used to be, since it is impossible to say how far the published rate is being adhered to. Events had been gradually drifting in this direction for some time past. The outer market, which is compelled to regulate its actions by the strict law of supply and demand, has constantly recognised this fact. Thus, in November, 1877, the metropolitan joint stock banks formally acknowledged that they could not remain bound by the old rule of allowing interest on deposits at "one below Bank rate," and undertook for the time an independent course of action. It is only needful to look in the money articles of the daily papers

to see what occurs when the Bank of England alters its rate. This is still regarded by the other banks as a sign that a change should be made, though not so closely as in former years. Thus, on June 6th, 1901, the Bank lowered its rate from 4 per cent. to $3\frac{1}{2}$ per cent., and the joint stock banks dropped their deposit rate to 2 per cent. On June 13th the Bank reduced its rate from $3\frac{1}{2}$ per cent. to 3 per cent., and the joint stock banks reduced theirs to $1\frac{1}{2}$ per cent.

But such a proof as the one just mentioned of the inability of the outside market to accept the Bank rate as an index to the real value of money, important as it was as a sign of the gradual breaking up of the traditional rule which had governed the English money market generally for years, is of far smaller importance than an official recognition by the Bank directors that the Bank itself can no longer be bound by its own rate. This, or nothing at all, is the outcome of the recent alteration in the practice of the Bank, and since it cannot be supposed that the Bank announced the alteration, and had to meet the objections which were certain to be made to it, without intending to abide by its decision, and to act upon it, the conclusion appears to be that the Bank rate by itself is distinctly less a guide to the value of money than it used to be.

The system which has thus almost come to an end commenced in the year 1844. Up to that date the Bank rate had been almost always a fixed rate, which for more than a century was never raised above 5 per cent., or allowed to drop below 4, irrespective of the market rate of the period. In 1839, a 6 per cent. rate was charged for some little time, but with what exception what may be regarded as the original state of matters continued till 1844, when the establishment of the principle of a rate to fluctuate according to the wants of the market was as great an innovation as the decision of the Bank in 1878. Ancient prestige, actual pre-eminence of capital, the fact that they are the bankers of the Government and the issuers of the only description of notes which are legal tender throughout England and Wales—all these circumstances enabled the Bank to take a position which gave its announcement as to a rate of interest a great if not a preponderating weight. The Bank of England told

all the monetary world what it would charge for money, and all the monetary world in degree followed it. Sometimes it has happened that the directors have not been right in their decisions, and have lowered the rate when they should have advanced it, or advanced it or lowered it when they ought to have remained where they were. Sometimes they have worried the market by needless alterations. Thus there were in the year 1873 no fewer than twenty-four changes in the Bank rate, that is to say, twenty-four changes in twelve months. It is difficult to imagine what events can possibly have occurred to justify an alteration in the price of money once a fortnight during a whole year. Since 1890, however, there have never been more than twelve changes in the twelve months. Again what may be called an experimental rate once occurred, as in 1871, when $2\frac{1}{4}$ per cent was charged for four weeks, the only time when a "quarter" rate has been officially announced.* Putting, however, these occasions aside, the decision of the directors of the Bank as to the value of money generally carries great weight with it. In a market so delicately balanced as ours, in which the causes of change are so numerous and often so unexpected, even the best informed must occasionally err. But the directors, as a body, are men of high standing and of much experience, acting with a strong sense of the responsibility of their position, and with considerable opportunities of observing what the demand for money is likely to be. The fixing the rate is indeed one of the portions of the work of carrying on the business of the Bank which such a body of men as the Bank directors are likely to do best. A committee of men with great and varied commercial experiences, fluctuating but slightly from year to year, with a head appointed for two years—which is, broadly speaking, the constitution of the Bank court—is very well constituted to judge of the value of money from day to day. It is not so well constituted to meet the greater difficulties which banking has nowadays to contend with, and which appear to require that a permanent governor should be appointed to maintain a more complete control over

* These points are also dealt with in Chapter X., p. 95, which contains Table 3, pp. 98, 99, showing the changes in the Rate of Discount charged by the Bank of England and the number of days at each Rate.

the business of the Bank than can be done by any body of directors, however able and well selected.

The constitution of the governing body of the Bank of England is a subject which has been frequently discussed, and it seems impossible to speak on this subject at all without saying something about it. The remarks on it by Mr. Bagehot in his well-known work, *Lombard Street*, are well known. His opinion was that the appointment of a permanent deputy-governor "would give to the decision of the Bank that foresight, that quickness, and that consistency in which those decisions are undeniably now deficient," and, it should be added, would secure the continuity in the management which is so much needed. Much must necessarily be left to the individual authority of the governor, who is usually a cautious man, with a well-trained business mind; but—as an example it is a most dangerous thing that one governor of the Bank should be able to say that he will, in time of pressure, make advances on Consols, and that another should, under similar circumstances, be at liberty to decline to do so. A settled sound policy, firmly carried out, is needed, and this should be secured.

Mr. Bagehot's remarks appeared some thirty years since. Few persons, however, remember that the subject was under the consideration of the Select Committee of the House of Lords appointed to consider the Commercial Distress which culminated in the panic of 1847. The report of that Committee, published in 1848, reprinted in 1857, is a singularly able and well-reasoned document. The Bank Act of 1844, a new and comparatively untried measure in 1848, came naturally under discussion. The question whether any remedial measures to meet the serious evils which followed the crisis of 1847 were possible was considered by the Committee. I need not apologise for quoting from their remarks, keeping the formal arrangement of capital letters in the document, which looks so strange to modern eyes. They entered on this branch of their subject with a recognition of "the Duty and Obligation of maintaining at all Times the practical Convertibility of the Bank Note." They considered this the first and most essential object to be kept constantly in view. The practical questions which arose were, "Whether this great Benefit is attained with

Certainty? Whether it is attained by proper Means, and whether the restrictions of the Act of 1844 are not attended with grievous and unnecessary Evils of a collateral Kind?" That many of the provisions of that Act were judicious was readily accepted by the Committee, but the attempt "to enforce by Law, under all Circumstances, one fixed and inflexible Rule for the Management of a national Bank of Issue, seems inconsistent with the best written Authorities, with the general Principles of Economic Science, as well as with the Testimony of many Witnesses of Practical Knowledge and Experience." . . . "It is difficult, in the Judgment of the Committee, to appeal to more demonstrative Evidence on this Subject than is to be found in the Treasury Letter of the 25th October [1847]. That Letter was a practical Repeal by an Act of Authority of the restrictive Clauses of the Act. It appears impossible at once to defend the restrictive Provisions of this Act, and to justify the Letter, which in this respect abrogated, or at least suspended, those very restrictive Provisions. The Committee consider that those Restrictions materially aggravated the Pressure and produced the Panic of October, 1847. But even if those Restrictions were originally defensible when enacted, their Hold on Opinion, as well as their Authority in Practice, had been materially impaired by the Letter by which they were superseded—by its acknowledged Necessity and by its undeniable Success. The Precedent is established, and its Application will inevitably be called for on other occasions." The report continues, "To leave these Cases, when they do arise, to be dealt with by the irregular Exercise of the mere Authority of the Crown and its Advisers, setting aside . . . the express provisions of a distinct Statute, appears wholly inconsistent with that Fixity and Order which it is, or ought to be, the Object of all Law to secure." Two suggestions were "made to the Committee, the one an absolute Repeal of the Act of 1844, the other a Continuance of the Act, accompanied by a Power of Relaxation." As the Committee were of opinion that many of the provisions of the Act were judicious, it was the second proposition which they advocated. They discussed the plans which had been suggested by which such a relaxing power might be exercised. These resolved themselves prac-

tically into three, "a legalised Authority vested in the Government; in the Government and in the Bank conjointly; or in the Bank of England alone. . . ." The "third proposal (which in the Judgment of the Committee is preferable to either of the two first), namely, vesting this Discretion in the Bank of England, cannot be disposed of without giving some Consideration to the Constitution of the Bank of England. The Objections which have been often urged against the Bank, more especially if entrusted with a Discretion like that now under Consideration, are a Want of Permanence and of Consistency derived from its System of periodical Elections of Governors and Deputy-Governors—the evil Consequences of filling these high and important Offices as well as the Appointments to the Committee of Treasury, by a mere Rotation of Seniority—and the intimate Connection subsisting between the Directors and the Commercial World of London, which may cast on them a Degree of Pressure difficult at Times to be resisted. It appears further to be apparent from the evidence that the immediate pecuniary Interest of the Proprietors as a Trading Company may at Times supersede or control larger and higher Considerations. This ought not to be . . . No narrow Views of the mere pecuniary Interests of its Proprietary should exclusively control its Action."

These remarks, made by a Committee of the House of Lords now more than half a century since, show for what length of time the subject of the constitution of the governing body of the Bank has been under consideration. The same points which required attention in 1848, the want of permanence and consistency in the management, the danger that the immediate pecuniary interests of the proprietors as a trading company might supersede larger and higher considerations were felt as strongly immediately after the passing of the Act of 1844 as they could be now. No personal criticism, of course, is intended in these remarks; they apply naturally to the circumstances under which the management of the Bank is carried on. The length of time that has elapsed doubtless shows how difficult it is to arrive at any satisfactory settlement of the question, which is now more important than at any previous period of our business history.

A distinct statement of policy on the part of the Bank as to the course of action they would follow in any time of business pressure, as well as on many other points, is now greatly needed. The Bank may carry out habitually the decision it is understood to have arrived at in 1878, and admit that it cannot fix a definite rate for advances. In this case it will be difficult to establish any other representative body in London whose resolutions as to the rate to be charged on bills would carry exactly the same weight as the decisions of an independent body, such as the directors of the Bank.

The inconvenience, however, of there being no recognised standard for the rate to be charged for money would be very great. It is far safest for all bankers, and for those who do business with them, that there should be such a standard. Since the Bank has let it be known that it does not mean to be guided by its own rate at all times, it may become needful to consider what standard can be established as a substitute for that guidance which will no longer exist exactly in the same form for the future, and what is to take the place of the public notice of the Bank rate. The bankers and bill-brokers of the metropolis seem the fittest persons to judge of the value of money, and the decision of a committee appointed by them, working together with representatives of the Bank, would be the best substitute that could be found for the decision of the Bank Court. It would, in fact, be the opinion of that court, strengthened by the judgment of those who had the best means of knowing what rate should be charged. This opinion would be more authoritative than that of the Bank of England alone. The rate to be allowed on deposits would naturally follow. This should be fixed not only for London, but for the country districts as well.

Such an arrangement would tend to check any undesirable competition for deposits, and would tend to a uniformity of action between all the bankers of the country generally, and of the metropolis in particular. All the banks would be represented on the committee proposed; and their representatives would concur in the rate to be recommended. Much has been said on both sides of the question as to whether the allowing interest on deposits, and the consequent enormous accumulation of money in the hands of banks, is a desirable thing or not;

but the allowing interest on deposits is so entirely the rule that the question is now not whether the practice is or is not a desirable one, but how it can best be regulated for the general advantage.

Again, such an arrangement would tend to check an unduly high rate of interest being allowed on deposits. The rate would be known as that which a representative and prudent body of bankers thought it safe to adopt. Any bank deviating from the rule would be bound, as it were, to show cause why it did not follow the example set by such a body of men. The Banking Committee would not be likely to recommend an unduly high rate. Such a rate is dangerous for two reasons: the one, because an unduly high rate of interest has a tendency to cause those who allow it to seek unsafe but highly-paying securities; the other, because it has a tendency to cause reserves to be pared down to a minimum. While speaking on this subject, it is well to mention that every now and then it is understood that banks have made no profit whatever on the sums they held on deposit. No doubt any bank so circumstanced holds other sums belonging to its customers on which no interest is allowed, and from which and its other resources it derives the means of meeting its expenses and paying its dividend. But to have the custody of vast sums, with all the attendant risks, without any resulting profit to set against these, cannot be a desirable or a safe thing.

In part the plan proposed here has been carried out for some considerable time. A committee, composed of representatives of the metropolitan joint stock banks, meets when a change in the Bank rate is announced, and fixes the rate to be allowed on deposits in London. It is desirable that this arrangement should be carried further, and that a uniform rate should be arranged at these meetings for all deposits held by banks whether in London or in the country.

To conclude, fixing a rate can hardly be separated from the custody of the reserve. The metropolitan banks might have elected, now that the Bank rate stands in so altered position, to work without a recognised rate at all as to allowance of interest on deposits. But the inconvenience of such a course would have been so great that they have been compelled to

devise the method mentioned above of establishing a recognised standard, which in time may, it is to be hoped, be carried further till it includes all the banking offices throughout the country. A further advantage of the method here sketched out would be that it would facilitate the formation and maintenance of a suitable reserve. The maintenance of such a reserve is a duty inseparable from the functions of the body on which lies the responsibility of fixing that rate which is the recognised standard for the rest of the community. The publication of the balances kept by the Clearing Bankers with the Bank of England would be an assistance to the attainment of this.

In reference to this question, it may be mentioned by way of illustration that the Associated Banks of New York habitually publish weekly the average amount of their own reserves in specie and legal tender notes. By the National Bank Acts of the United States, which govern the administration of these banks, a fixed legal minimum has to be held in this manner. It is therefore a far more serious thing for the Associated Banks of New York to publish their figures, which may show that their reserves are below the legal limit, than it would be for the English banks to publish the amount of their balances with the Bank of England, which they keep at the point which each bank fixes for itself. In the case of the American banks the legal minimum is a strict and rigid line. In the case of the English banks, the amount is left to their own discretion. The practice of the American banks is merely quoted here by way of illustration. Their action is a proof that publication tends towards safety and need not be regarded as any occasion for alarm.



CHAPTER VII

BILLS DISCOUNTED AND TEMPORARY ADVANCES OF THE BANK OF ENGLAND

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THE manner in which the deposits held by the Bank are employed requires our attention. The capital and accumulated and undivided profits of the Bank of England (the "rest") amount together to about 17½ millions.

The securities held by the Bank of England are divided in the usual weekly statements between the two heads of "Government" and "other" securities. It has not been thought necessary to make any further analysis of the Government securities held by the Bank than that given in Chapter II., p. 27, as a large proportion of these securities, and, in particular, those held in the circulation department, are so permanent in amount for long periods that no detailed statement appeared likely to be generally useful. The "other" securities are not included among the statements of monthly averages

on which a great part of this analysis is based, but as an investigation into their amount will be of service, the yearly averages have been tabulated from the ordinary weekly returns.

The total annual average amount of the "other" securities will be found in col. 26 of Table 3, p. 13.

The increase in the sums thus held is large, and in a general way proportionate to the increase in the deposits.

Mr. Thomson Hankey intimated, in his remarks on the working and management of the Bank of England, that, while the deposits of the Bank should be invested in good banking securities, such as bills of exchange, loans for short periods or good securities, Government stocks, etc., the capital may be invested in securities of a more permanent description. "With regard to the investment of the capital, no part of this is required to be kept in reserve: all may be invested in interest-bearing securities, which should be of undoubted character, but not necessarily of the same readily convertible nature as that part which is held liable to recall of deposits."—Hankey, *On Banking*, pp. 13, 14.

The bills discounted and temporary advances have been separated in the tabular statement from the remainder of the "other securities" to as late a date as the published returns permit. It will be observed that the portion of the "other securities" which does not consist of bills discounted or of temporary advances, the annual average of which is given in col. 28 of Table 3, p. 14, fluctuated less in amount for the years 1873 to 1875, the last for which the information can be given, than the "bills discounted" or the "temporary advances." Guided by Mr. Thomson Hankey's remarks, we may suppose the sums indicated in col. 26 to be invested in loans to corporations for local improvements, to railways on debenture stock, in securities of colonial governments, and in other securities more or less of a permanent character. Mr. H. L. Holland, deputy-governor of the Bank, stated in 1865 that the amount of railway debentures held at that time was about 4 millions. The fluctuations in the total amount of the "other" securities, as compared with those held in 1844, will be found marked in col. 27 of Table 3, p. 13.

We now proceed to consider the amount of bills discounted

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by the Bank of England. The yearly average of these, from 1844 to 1875, is given in col. 30 of Table 3, p. 14. Col. 31 contains the proportion of the yearly average to that of 1844, and col. 32 shows the proportion of the bills discounted to the total of the "other" securities. The bills discounted never amounted to half of the total of the "other" securities. On average they were something like a third of these. The information about the amount ceases in 1875. The fluctuations in the amount of bills discounted was very considerable during the period over which our information extends. The amount for 1868 was only about one half that of 1866, and was very nearly similar to the average of 1845. There are larger fluctuations also shown in the weekly statements than those between these annual averages.

In 1866 the highest amount was about 16 millions, the lowest about 7 millions.

" 1867	8	"	$4\frac{1}{2}$	"
" 1868	7	"	4	"
" 1869	7	"	4	"
" 1870	10	"	5	"
" 1871	11	"	4	"
" 1872	9	"	4	"
" 1873	12	"	4	"
" 1874	6	"	3	"
" 1875	6	"	2	"

There was a considerable increase in this branch of the business of the Bank between 1844 and 1875, after which year no information as to the amount of the bills discounted has been published; but it will be observed that the average of the three years, 1845-47, rather exceeded the average of the three years 1873-75, and the whole amount, though large, can form but a very small part of the total amount of bills, both inland and foreign, in circulation. The amount of these bills in circulation, including foreign bills, was estimated by myself as being from 300 to 350 millions in 1873. The total now in circulation (in 1902) probably scarcely exceeds, if it even reaches, the smaller of these figures. Mr. Newmarch's estimate in 1851 was that the corresponding amounts of bills in circulation then were from 180 to 200 millions. During the twenty years between 1850 and 1870 they had largely increased, but it is not believed that the amount of bills now in circulation has kept up at all in proportion to the increase

in business generally. The difference in the arrangements of business nowadays and those existing in 1873, and the manner in which the official returns as to bill stamps are now made up, render it difficult to form any reliable estimate of the account of bills in circulation. The position, speaking broadly, appears to be that there are fewer bills now afloat than before in proportion to the amount of banking money held, and that there is a far keener competition for them.

The influence of the Bank of England in the discount market has in times past been considerable; but its influence in this direction would not appear to be so large as in some other portions of its business, since its discounts had not increased in the same proportion as the bills themselves, nor had the discounts of the Bank continued to increase during the later years in which the published returns enable us to trace the business of the Bank in this particular. A large portion of the deposits, it is believed, has been invested in more permanent securities. The proportion of bills discounted to "other" securities is given in col. 32 of Table 3, p. 14, and it will be observed that the proportion of the resources of the Bank placed in bills rather diminished in the later years over which our information extends. The table exemplifies the fact, which is generally known, that it is in times of difficulty and pressure that discounters of bills have recourse to the Bank. In 1847, 1857, and 1866 the amounts were large. There are beyond doubt private houses, as well as public companies, who do a larger business of this description than the Bank of England. In ordinary seasons the outside market is willing to accommodate its customers on slightly lower terms; and, in discounting bills, those who do the business at the lowest figure are sure to have the preference.

The immediate wants of business are, perhaps, to be found most distinctly indicated among the temporary advances made by the Bank of England, shown in col. 33 of Table 3, p. 14. No branch of business of the Bank appears to undergo greater fluctuations than this one, and in none are the influences of periods of pressure more distinctly marked. The amount for 1872 was three times as large as that in 1844. The business done in 1852 was not a sixth part of that done twenty years later.

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The steady growth of this branch of the business was very remarkable during the last ten years of which the particulars can be given. The annual averages will be found in col. 33 of Table 3, p. 14, and the proportion of each year to the amount in 1844 is given in col. 34. The fluctuations from week to week are far greater than those shown by the yearly averages.

In 1866 the highest amount was about 8 millions, the lowest about 1 million.

" 1867	"	4	"	1	*
" 1868	"	4	"	1	"
" 1869	"	5	"	1	"
" 1870	"	9	"	2	"
" 1871	"	6	"	1	*
" 1872	"	10	"	2	"
" 1873	"	7	"	1	"
" 1874	"	8	"	2	"
" 1875	"	9	"	2	"

The extension of the scale on which business has proceeded is curiously marked by the increase in the fluctuations during the later years in which this information was given. The requirements of occasional borrowers were actually greater, and the yearly averages higher, in the years 1870 and 1872 than even in the panic year of 1866.

It is much to be regretted that the information as to the amounts of bills discounted and of the temporary advances, given in the returns up to 1875, is now no longer supplied, and that it is not possible to trace this subject any further.

After all, the Bank of England is, with respect to its private business, exactly in the same position as any other bank. It has only a certain definite sum which it can lend, and this it must husband, and not make advances which do not naturally turn themselves into money—as those made on good bills do—on the same terms as advances of the class we have been speaking of. The resources of the Bank are very considerable; but if it made over-large advances on securities of a fixed character, it would experience the inconvenience of doing this just as any other bank would do.

CHAPTER VIII.

NOTE CIRCULATION OF THE BANK OF ENGLAND, BULLION HELD IN THE ISSUE DEPARTMENT, AND THE ENGLISH COUNTRY NOTE CIRCULATION

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The amount of notes issued by the Bank now comes under consideration. Table 6, p. 70, gives the monthly averages of the notes of the Bank held by the public divided into groups of years—corresponding to the other tables from 1845

TABLE 6.

Monthly Averages of Note Circulation of Bank of England in the hands of the Public,* from 1845-1900, in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	1845-54.		1855-64.		1865-74.		1875-84.	
	Average for the Ten Years, £20,061,000.	Avg. of Ten Years = 100.	Average for the Ten Years, £20,388,500.	Avg. of Ten Years = 100.	Average for the Ten Years, £24,027,500.	Avg. of Ten Years = 100.	Average for the Ten Years, £27,020,700.	Avg. of Ten Years = 100.
January .	£ 20,317,100	101	£ 20,253,400	99	£ 23,664,600	98	£ 27,185,700	101
February .	19,930,900	100	19,806,900	97	23,106,300	96	26,395,500	98
March .	19,506,900	97	19,619,000	96	22,979,300	96	26,159,900	97
April .	20,500,400	102	20,715,700	102	24,061,000	100	27,151,300	100
May .	20,211,300	101	20,488,100	100	24,190,500	101	27,179,200	101
June .	19,624,500	98	20,048,100	98	23,893,200	99	26,845,600	99
July .	20,056,200	103	21,086,500	103	24,874,300	103	27,043,400	102
August .	20,325,900	101	20,840,600	102	24,678,200	103	27,572,900	102
September .	19,652,400	98	20,365,700	100	24,251,700	101	26,930,900	100
October .	20,561,800	103	21,181,200	104	24,970,600	104	27,668,900	102
November .	20,141,600	100	20,573,300	101	24,133,200	100	26,941,700	100
December .	19,304,900	96	19,684,000	97	23,527,400	98	26,685,200	99
Difference : Highest and Lowest Month, £1,351,000.		Difference : Highest and Lowest Month, £1,562,000.		Difference : Highest and Lowest Month, £1,991,000.		Difference : Highest and Lowest Month, £1,509,000.		
Mean of extreme Variations for 1845-54, 3 3 %		Mean of extreme Variations for 1855-64, 4 %		Mean of extreme Variations for 1865-74, 4 %		Mean of extreme Variations for 1875-84, 2 5 %		

Month.	1885-94.		1895-1900.		1845-1900.		
	Average for the Ten Years, £24,883,400.	Average of Ten Years = 100.	Average for the Six Years,** £27,360,924.	Average of Six Years = 100.	Average for the Fifty-six Years, £33,726,100.	Average of Fifty-six Years = 100.	
January .	£ 24,571,600	99	£ 26,569,908	97	£ 23,559,600	100	
February .	23,982,300	96	26,132,162	95	23,000,100	97	
March .	23,922,100	96	24,446,964	97	23,045,600	97	
April .	24,799,200	100	27,358,572	100	23,847,900	100	
May .	24,979,100	100	27,377,380	100	23,834,700	100	
June .	24,983,500	101	27,510,563	101	23,535,900	99	
July .	25,797,100	104	28,259,428	103	24,466,500	103	
August .	25,631,400	103	28,170,168	103	24,276,900	102	
September .	24,962,000	100	27,701,804	101	23,716,100	100	
October .	25,503,100	103	27,933,312	102	24,400,900	103	
November .	24,838,300	100	27,421,564	100	23,762,600	100	
December .	24,631,500	99	27,449,461	100	23,266,400	98	
Difference : Highest and Lowest Month, £1,014,800.		Difference : Highest and Lowest Month, £2,127,000.		Difference : Highest and Lowest Month, £4,665,000.		Mean of extreme Variations for 1885-94, 4 %	
Mean of extreme Variations for 1895-1900, 4 %		Mean of extreme Variations for 1845-1900, 3 %		Mean of extreme Variations for 1845-1900, 3 %		Mean of extreme Variations for 1845-1900, 3 %	

* Not including those held in the Banking Department

TABLE 7.

Monthly Averages of Bullion in the Issue Department of the Bank of England, from 1845-1900, divided into groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	1845-54.		1855-64.		1865-74.		1875-84.	
	Average for the Ten Years, £14,625,000. =100.	Av. of Ten Years	Average for the Ten Years, £13,645,000. =100.	Av. of Ten Years	Average for the Ten Years, £19,356,000. =100.	Av. of Ten Years	Average for the Ten Years, £24,436,000. =100.	Av. of Ten Years
January . .	14,815,000	101	13,112,000	96	19,236,000	99	23,206,000	95
February . .	14,833,000	102	13,354,000	98	19,138,000	99	23,620,000	97
March . .	14,996,000	103	13,789,000	101	19,165,000	99	24,291,000	99
April . .	14,372,000	98	13,714,000	100	18,650,000	96	24,398,000	100
May . .	14,175,000	97	13,634,000	101	18,345,000	95	24,160,000	99
June . .	14,839,000	102	14,263,000	105	19,928,000	103	25,218,000	103
Jly . .	14,945,000	102	14,256,000	102	20,212,000	104	26,049,000	100
August . .	14,637,000	100	14,102,000	103	19,935,000	103	25,767,000	100
September . .	14,557,000	100	14,170,000	102	20,190,000	104	25,690,000	105
October . .	14,111,000	96	13,438,000	98	18,881,000	98	24,458,000	100
November . .	14,394,000	98	12,778,000	94	18,903,000	98	23,268,000	95
December . .	14,824,000	101	13,132,000	96	19,685,000	102	23,109,000	95
Difference : Highest and Lowest Month, £885,000.			Difference : Highest and Lowest Month, £1,405,000.		Difference : Highest and Lowest Month, £1,867,000.		Difference : Highest and Lowest Month, £2,940,000.	
Mean of extreme Variations for 1845-54, 3·5%.			Mean of extreme Variations for 1855-64, 5·5%.		Mean of extreme Variations for 1865-74, 4·5%.		Mean of extreme Variations for 1875-84, 5·5%.	

Month	1885-94.		1895-1900.		1845-1900.	
	Average for the Ten Years, £22,033,000. =100.	Av. of Ten Years	Average for the Six Years, £14,149,000. =100.	Average of Six Years, =100.	Average for the Fifty-six Years, £20,013,000. =100.	Average of Fifty-six Years, =100.
January . .	21,020,000	92	33,690,000	99	19,929,000	97
February . .	22,401,000	98	35,476,000	104	20,486,000	99
March . .	23,339,000	102	35,470,000	104	20,869,000	101
April . .	22,823,000	100	33,572,000	98	20,368,000	99
May . .	22,654,000	99	34,249,000	100	20,267,000	98
June . .	24,578,000	107	35,197,000	103	21,419,000	104
July . .	24,929,000	109	35,023,000	103	21,679,000	105
August . .	23,124,000	105	35,205,000	107	21,337,000	103
September . .	23,503,000	103	35,557,000	104	21,341,000	103
October . .	22,052,000	96	32,866,000	96	20,112,000	98
November . .	21,609,000	94	32,035,000	94	19,674,000	95
December . .	21,641,000	95	31,575,000	92	19,881,000	96
Difference : Highest and Lowest Month, £3,909,000.			Difference : Highest and Lowest Month, £3,083,000.		Difference : Highest and Lowest Month, £2,005,000.	
Mean of extreme Variations for 1885-94, 8·5%.			Mean of extreme Variations for 1895-1900, 6%.		Mean of extreme Variations for 1845-1900, 5%.	

Gold Bullion in the Issue Department of the Bank of England.

	L. Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each period.
1845-54 . .	885,000	3·5
1855-64 . .	1,485,000	5·5
1865-74 . .	1,867,000	4·5
1875-84 . .	2,940,000	5·5
1885-94 . .	3,909,000	8·5
1895-1900 . .	3,982,000	6

to 1900—with a summary table of the whole period. This shows how generally equable the note circulation of the Bank is. The highest months in the returns from July to October do not correspond with the highest months in the table of the rate of discount charged (Table 12, p. 97). They no doubt represent a demand arising from the annual "Autumnal Drain" described in Chapter XIV., Table 20, p. 138.

Annual averages of the notes held by the public will be found in cols. 35, p. 14, and 37, 39, p. 15, of Table 3, which give the country circulation, the metropolitan circulation of the Bank of England, and the amount of both these united. The extension of this portion of the business of the Bank was very small for more than twenty years. On average there had been hardly any increase up to 1864. Since then there has been a gradual growth, which advanced to 45 per cent. in 1900. The notes held by the public are issued partly in London, partly at the provincial branches of the Bank. The circulation has been divided under these two heads down to the close of 1881. The returns accessible do not continue this division to a later date. Up to 1875 the increase in the circulation, as will be seen by col. 35, p. 14, took place rather in the country than in the London circulation, which will be found in col. 37, p. 15. While the provincial circulation in 1844 formed only 32 per cent. of the total circulation of the Bank, it formed in 1873 and 1874 about 39 per cent., and from 1878 to 1881 the provincial circulation formed 35 per cent. of the total. The whole note circulation of England and Wales, including the notes issued by the private and joint stock banks, was £28,420,000 in 1844, £32,500,000 in 1877, £32,400,000 in 1878, and £30,638,000 in 1900, divided at that date between £29,396,000 at the Bank of England and £1,242,000 at the English country issuing banks. Hence the Bank of England notes issued at the country branches may in some degree have taken the place of lapsed local note issues, and this may account for the greater increase of the provincial than of the metropolitan note circulation. The total increase is, however, small—smaller than the augmentation in any other portion of the business of the Bank of England which these returns enable us to trace, and far smaller than the increase in the metallic

circulation of the country, which was estimated as being about 105 millions in 1872, and from £100,000,000 to £140,000,000 in 1883,* by Mr. Newmarch as £36,000,000 in 1844,† by Sir R. Peel as between £30,000,000 and £35,000,000 (H. of Commons, April 25th, 1815). While, therefore, the coin in circulation has increased something like seventy millions, the total note circulation of England and Wales was in 1900 only two millions larger than it was in 1844. It is also quite possible that this increase, small as it is, may prove to be only temporary, as fluctuations of from one and a half millions to two millions, and even of larger amounts, are not uncommon between the average of one year and another in the note circulation of the Bank of England. The figures for the years from 1879 to 1885 are examples of this in the way of diminution, and those from 1894 to 1900 in the way of increase.

Year.	Notes of Bank of England held by the Public. Average.			Notes of Bank of England held by the Public. Average.
		Year.		
1879	£29,212,000	1894	.	£25,300,000
1880	26,915,000	1895	.	25,800,000
1881	26,321,000	1896	.	26,500,000
1882	25,985,000	1897	.	27,200,000
1883	25,568,000	1898	.	27,400,000
1884	25,358,000	1899	.	27,900,000
1885	24,667,000	1900	.	29,400,000

Table 8, p. 75, contains the averages of the English country note circulation from 1845 to 1900, divided into periods corresponding to those into which the other tables contained in this volume are arranged. The statement is brought in here, as this will be convenient to those who desire to see the details of the manner in which the note circulation of England is made up. Under the operation of the Act of 1844 the country note circulation has dwindled till, from being

* Estimates based on Professor Jevons's statement, "Investigations in Currency and Finance," 1884, p. 266 *et seq.*; on statement of "Coinage of Gold for Twenty-four Years," *Economist*, 29th June, 1872; and on papers read by R. H. Inglis Palgrave, before the Bankers' Institute, February, 1883, on *The Deficiency of Weight in our Gold Coinage, with a Proposal for its Reform*, and November, 1884, on the *Gold Coinage: Position of Matters at the Present Time*.

† TOOKE and NEWMARCH'S *History of Prices*, vol. vi. p. 701.

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(1845 to 1847) more than £7,000,000, it is now (1902) less than £875,000. The note circulation of the Bank of England has thus apparently hardly filled the void which the reduction of the country note circulation has left; and if the amount of the notes of the Bank of England held by the other banks in England as "till money" could be separated from the remainder, it is probable that the total amount of notes actually in the hands of the public is smaller now than it was some fifty years since. Nor is it advisable to leave this part of the subject without an expression of regret at the policy followed in framing the Act of 1844, which, instead of strengthening the country note circulation, was designed to suppress it, thereby increasing the demands on the reserve of the Bank at times when the note circulation tends naturally to expand, and simultaneously depriving English banks of a branch of their business particularly useful in the establishment of small branches in remote districts, and thus developing business and trade in places where this assistance is most needed. A reasonable stamp duty might have been charged for the exercise of this privilege, which might have produced a larger revenue to the Government than that received from the note circulation of the Bank, issued against securities under the provisions of the Act of 1844, beyond the £14,000,000 originally permitted by that Act. The notes could easily have been amply secured, and an advantage to business maintained. Scotland and Ireland have retained their provincial note issues. In England a different course has been followed, to the disadvantage of the country.

The fluctuations in the English country note circulation have been small; they do not exactly follow those shown in the circulation of the Bank of England, partly perhaps because that has been more in the metropolis, while the country note issue was largely among the agricultural districts.

Table 9, p. 77, shows the amounts and the proportions of the different denominations of notes composing the circulation of the Bank of England for the years 1856-76, the earliest and the latest dates available. The large notes, it will be seen, formed in 1876 a smaller part of the whole circulation than they did twenty years previously. The notes from £20 to

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TABLE 8.

Monthly Averages of Country Note Circulation, England, from 1845-1900, in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	1845-54.		1855-64.		1865-74.		1875-84.	
	Average for the Ten Years, £6,794,000.	Avg. of Ten Years = 100.	Average for the Ten Years, £6,344,000.	Average of Ten Years = 100.	Average for the Ten Years, £5,118,000.	Avg. of Ten Years = 100.	Average for the Ten Years, £3,888,000.	Average of Ten Years = 100.
January	6,862,000	101	6,415,000	101	5,268,000	103	4,975,000	105
February	6,731,000	99	6,235,000	98	5,112,000	100	3,832,000	98
March	6,749,000	99	6,302,000	99	5,085,000	99	3,822,000	98
April	7,117,000	105	6,040,000	105	5,375,000	105	4,087,000	105
May	7,002,000	103	6,508,000	103	5,272,000	103	4,048,000	104
June	6,676,000	98	6,251,000	98	4,963,000	97	3,843,000	99
July	6,658,000	98	6,170,000	97	4,886,000	95	3,772,000	97
August	6,494,000	96	6,062,000	95	4,826,000	94	3,644,000	94
September	6,625,000	98	6,216,000	98	4,955,000	97	3,727,000	96
October	7,130,000	105	6,045,000	105	5,375,000	105	4,058,000	104
November	6,885,000	101	6,510,000	103	5,230,000	102	3,971,000	102
December	6,601,000	97	6,179,000	97	5,061,000	99	3,775,000	97
Difference	Highest and Lowest Month, £636,000		Difference: Highest and Lowest Month, £53,000.		Difference: Highest and Lowest Month, £549,000.		Difference: Highest and Lowest Month, £443,000.	
Mean of extreme Variations for 1845-54, 4·5%			Mean of extreme Variations for 1855-64, 5%		Mean of extreme Variations for 1865-74, 5·5%		Mean of extreme Variations for 1875-84, 5·5%	

Month.	1885-94.		1895-1900.		1845-1900.	
	Averag. for the Ten Years, £2,356,000.	Average of Ten Years = 100.	Average for the Six Year., £1,446,000.	Average of Six Years = 100.	Average for the Fifty-six Years, £4,533,000.	Average of Fifty-six Years = 100.
January	2,432,800	103	1,474,000	102	4,639,000	102
February	2,335,100	99	1,438,000	99	4,484,000	99
March	2,393,800	101	1,482,700	102	4,507,000	100
April	2,479,900	105	1,554,500	108	4,756,000	104
May	2,478,100	105	1,549,300	107	4,685,000	103
June	2,353,400	99	1,457,700	101	4,457,000	98
July	2,315,100	98	1,384,500	96	4,402,000	97
August	2,217,900	94	1,314,300	91	4,291,000	95
September	2,222,200	94	1,354,300	94	4,385,000	97
October	2,420,000	102	1,464,300	101	4,733,000	104
November	2,117,000	102	1,482,200	102	4,627,000	103
December	2,377,300	98	1,407,000	97	4,426,000	98
Difference: Highest and Lowest Month, £66,000.			Difference: Highest and Lowest Month, £40,000.		Difference: Highest and Lowest Month, £465,000.	
Mean of extreme Variations for 1885-94, 5·5%.			Mean of extreme Variations for 1895-1900, 5·5%.		Mean of extreme Variations for 1845-1900, 5%.	

£100 remained comparatively stationary; the greater part of the increase was among the smaller notes, especially among those for £5. These, doubtless, as mentioned previously, in some degree have taken the place of the lapsed English country issues.

To complete this analysis, the annual average of the total coin and bullion held by the Bank has been included. This average will be found in col. 41, Table 3, p. 15; the columns marked 42, 43, 44, and 45 show the proportions which the bullion has borne to the amount held in 1844, to the liabilities on deposits and bank post bills, to the note circulation, and to the total liabilities under these two heads combined. The proportion of the bullion to the liabilities is smaller now than it was in the earlier years over which this inquiry extends, while the amount of bullion held has more than doubled (Table 3, col. 42, p. 15). The monthly averages of the bullion held in the Issue Department are given in Table 7, p. 71.

A considerable increase, but smaller on the whole than that in the reserve and than that in the deposits, will be observed to have taken place in the bullion held. It has been mentioned that there appears to be no general relation whatever between the amount of notes issued and the rate of interest charged. Nor is it easy to trace an exact relation between the amount of bullion held and the Bank rate. The average held in 1868 was more than 20 millions, with a discount rate of 2 per cent.; the holding in 1873 was about 22 millions, with a rate of $4\frac{3}{4}$ per cent.; the average held in 1876 was 28 millions, with a rate of about $2\frac{1}{2}$ per cent.; the average was, in round figures, 26 millions in 1873, with a rate of about 3 per cent., and 33 millions in 1898, with a rate of $3\frac{1}{4}$ per cent.; and the differences shown by the weekly returns are greater still. Thus 7 per cent. was charged on 9th November, 1872, with £19,750,000 bullion held on the date of the nearest return, while 3 per cent. was charged on 4th November, 1869, with £18,500,000, more than a million less, held in a similar way. Again, 3 per cent. was charged 10th February, 1875, with 20 millions of bullion, and 5 per cent. was charged 17th October, 1877, with nearly 23 millions of bullion. Though the total amount of bullion held by the Bank is a very important thing, the rate of

TABLE 9.—Table showing Composition of Bank of England Note Circulation. Divided according to the Denomination of the Notes in Hands of the Public from 1856 to 1876, the latest date to which this information can be given.

	£5 Notes.	Proportion per Cent. to 1856 = 100.	Proportion per Cent. of £5 Notes to Total Circula-	£10 Notes.	Proportion per Cent. to 1856 = 100.	Proportion per Cent. of £10 Notes to Total Circula-	£20 to £100 Notes.	Proportion per Cent. to 1856 = 100.	Proportion per Cent. of £20 to £100 Notes to Total Circula-
1856	6,362,000	100	33	3,928,000	100	24	5,474,000	100	29
1857	6,386,000	100	34	3,959,000	101	21	5,530,000	101	29
1858	6,299,000	99	32	3,896,000	99	20	5,652,000	103	29
1859	6,678,000	105	32	4,145,000	105	20	6,121,000	112	29
1860	7,079,000	111	33	4,280,000	109	20	6,331,000	116	30
1861	6,673,000	105	33	4,045,000	103	20	5,947,000	108	30
1862	6,799,000	107	33	4,080,000	104	19	6,172,000	113	30
1863	6,755,000	106	33	3,949,000	100	19	6,142,000	112	30
1864	7,099,000	112	35	3,966,000	101	19	5,996,000	109	29
1865	7,403,000	116	35	4,085,000	104	19	6,153,000	112	29
1866	8,153,000	128	35	4,462,000	113	19	6,957,000	127	30
1867	8,290,000	130	35	4,492,000	114	19	7,020,000	128	30
1868	8,429,000	132	35	4,562,000	116	19	7,234,000	132	30
1869	8,572,000	135	37	4,514,000	115	19	6,940,000	127	30
1870	8,695,000	137	38	4,436,000	113	19	6,804,000	124	29
1871	9,182,000	145	37	4,592,000	117	19	7,272,000	133	30
1872	9,704,000	153	38	4,712,000	120	19	7,373,000	134	29
1873	10,045,000	158	39	4,716,000	120	18	7,313,000	133	29
1874	10,474,000	164	40	4,790,000	122	18	7,435,000	130	28
1875	10,877,000	171	40	4,934,000	126	18	7,740,000	141	28
1876	10,920,000	172	40	5,003,000	127	18	7,987,000	145	29

	£500 to £500 Notes.	Proportion per Cent. to 1856 = 100.	Proportion per Cent. of £500 Notes to Total Circula-	£1,000 Notes.	Proportion per Cent. to 1856 = 100.	Proportion per Cent. of £1,000 Notes to Total Circula-	Total Circula-	Proportion per Cent. of Total Circula- tion to 1856 = 100.
1856	1,375,000	100	7	1,865,000	100	10	19,004,000	100
1857	1,365,000	99	7	1,796,000	96	9	19,036,000	100
1858	1,590,000	116	8	2,318,000	124	11	19,765,000	104
1859	1,610,000	117	8	2,256,000	121	11	20,810,000	109
1860	1,551,000	113	7	2,029,000	109	10	21,270,000	112
1861	1,444,000	105	7	1,911,000	102	10	20,020,000	105
1862	1,697,000	123	8	2,098,000	112	10	20,840,000	109
1863	1,740,000	127	8	2,089,000	112	10	20,675,000	105
1864	1,676,000	122	8	1,849,000	99	9	20,580,000	108
1865	1,694,000	123	8	1,761,000	94	9	21,090,000	111
1866	1,831,000	133	8	1,795,000	96	8	23,198,000	122
1867	1,827,000	133	8	1,834,000	98	8	23,463,000	123
1868	1,867,000	136	8	1,825,000	98	8	23,917,000	126
1869	1,761,000	128	7	1,667,000	89	7	23,454,000	123
1870	1,701,000	124	7	1,676,000	90	7	23,312,000	123
1871	1,774,000	129	7	1,783,000	96	7	24,603,000	130
1872	1,851,000	136	7	1,885,000	101	7	25,525,000	134
1873	1,974,000	130	7	1,810,000	97	7	25,668,000	135
1874	1,810,000	132	7	1,775,000	95	7	26,284,000	138
1875	1,947,000	141	7	1,849,000	99	7	27,347,000	144
1876	1,984,000	144	7	1,839,000	98	6	27,733,000	140

NOTE.—For years 1856 to 1859, inclusive, these averages represent the first 15 weeks of each year; from 1860 to 1876, inclusive, the averages are of the whole circulation of the year.

discount charged does not appear to be usually regulated by it alone.

To render this more clear, the percentage borne by the annual average of the total coin and bullion held by the Bank of England to the annual average of the banking liabilities has been stated in col. 43 of Table 3, p. 15. The fluctuations shown are considerable; the proportion, however, hardly has had a tendency to increase, except in the years 1875-6. In 1852 the average of bullion was 2 per cent. more than the average of the banking liabilities. In 1847, 1856, 1864, and 1866 the average bullion held amounted to 65 per cent. of the banking liabilities. In 1857 it was only 57 per cent. of these. In 1900 it was 67 per cent. But though, generally speaking, the years when the average of bullion is low are those when the rate of interest is high, yet it is not possible to trace the same connection between the bullion and the rate of interest as between the banking reserve and the rate of interest.

The proportion of the total coin and bullion held to the liabilities and circulation united is given in col. 45 of Table 3, p. 15. Though this point sometimes escapes observation, owing to the separation of the Issue Department from the Banking Department of the Bank, yet it deserves the most serious consideration. The strength of the Bank, in any period of pressure, depends largely on the proportion which the specie held bears to its total liabilities. It will be observed that the proportion which the bullion held bore to the liabilities and circulation united was the same in 1900 as it had been in 1844, and smaller than in the years between 1894 and 1897.

What the accounts of the Bank would look like if the separation of the two departments did not take place is shown in the arrangement of the balance sheet printed in Table 40, p. 207.

The Bank of England has sometimes held a considerable amount of silver bullion. The Bank is empowered by the third clause of the Act of 1844 to retain in the Issue Department an amount of silver bullion not exceeding one-fourth part of the gold coin and bullion held. The Bank has never held so large a proportion as this. The largest amount which it has held was £2,727,000 on October 3rd, 1846, when the gold bullion

was quoted at £12,632,000. For the years from 1844 to 1847 the silver bullion formed, however, a considerable fraction of the total amount of bullion held, and the annual averages from 1844 to 1853 are given in Table 10, p. 80. On August 20th, 1853, the silver bullion ceased to be quoted in the returns of the Bank of England, except during the period from November 28th, 1860, to July 3rd, 1861, when the Bank held some silver bullion, as shown in Table 10, p. 80. The heading and the space for the entry appeared weekly, however, in the return for many years afterwards.

The question whether it might not be desirable that the Bank of England should hold silver bullion again was discussed, some years since, in connection with the low quotation for the Indian exchanges. Should such an operation ever be undertaken by the Bank again, it may be supposed that it would not be done except under a guarantee from the Government, on whose behalf the business would be carried out. When the Bank Act was passed in 1844, "silver" was far more distinctly "money" throughout Europe than it is at the present time.



TABLE 10.—SILVER BULLION HELD BY THE BANK OF ENGLAND,
1844-53, 1860-61.

Annual Averages of Silver Bullion Held in the Issue Department of the Bank of England and Proportion of the Same to the Gold Bullion and Coin Held during the Years 1844-53.

Year.	Annual Average of Silver Bullion.	Proportion per Cent. of Silver Bullion to Total Bullion Held.	Annual Average of Bullion, including Gold and Silver Coin in Banking Department.	Proportion per Cent. of Gold and Coin to Total Bullion Held.	Annual Average of Total Bullion and Coin.
1844	1,640,000	11	13,024,000	89	14,664,000
1845	1,511,000	10	13,732,000	90	15,243,000
1846	2,169,000	15	12,616,000	85	14,785,000
1847	1,373,000	13	9,055,000	87	10,428,000
1848	1,125,000	8	12,747,000	92	13,872,000
1849	336,000	2	14,825,000	98	15,161,000
1850	195,000	1	16,441,000	99	16,636,000
1851	34,000	—	14,530,000	100	14,564,000
1852	28,000	—	20,559,000	100	20,587,000
1853	19,000	—	17,497,000	100	17,516,000

Gold Coin and Bullion and Silver Bullion in the Issue Department of the Bank of England, 1860 and 1861.

Year.	Gold.	Silver.	Year.	Gold.	Silver.
1860. Nov. 28	12,725,000	336,000	1861. March 20	10,981,000	848,000
Dec. 5	12,410,000	511,000	" 12	11,054,000	848,000
" 12	11,768,000	876,000	April 3	11,345,000	848,000
" 19	11,456,000	1,114,000	" 10	11,525,000	848,000
" £ 640,000	1,454,000	" 17	11,520,000	848,000	
1861. Jan. 2	10,292,000	1,064,000	" 24	11,437,000	890,000
" 9	9,870,000	1,627,000	May 1	11,326,000	713,000
" 16	9,535,000	1,470,000	" 8	11,302,000	713,000
" 23	9,344,000	1,445,000	" 15	10,883,000	663,000
" 30	9,560,000	1,282,000	" 22	10,597,000	564,000
Feb. 6	9,745,000	1,268,000	" 29	10,825,000	512,000
" 13	9,903,000	848,000	J. ne 5	10,658,000	412,000
" 20	10,240,000	848,000	" 12	10,748,000	362,000
" 27	10,521,000	848,000	" 19	11,155,000	262,000
March 6	10,303,000	848,000	" 26	11,466,000	212,000
" 13	10,596,000	848,000	July 3	11,150,000	71,000



CHAPTER IX

THE RESERVE AND THE LIABILITIES OF THE BANK OF ENGLAND

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IN considering the amount of the reserve of the Bank of England—that is, of the resources which it can employ to meet any demand for cash which may be made on it—a different course, owing to the form of account which was ordained by the Bank Act of 1844, has to be followed from that which has to be used in examining the position of almost every other bank in the world.* In the case of the Bank of France, in that of the

* The National Bank of Egypt divides its accounts in the same manner.

LIABILITIES AND RESERVE, 1845-1900

[CH. IX]

TABLE II.

Monthly Averages of Liabilities and Reserve of the Bank of England, 1845-1900.

1845-54.	Liabilities: Average for the Ten Years, £17,766,341.	Average of Ten Years = 100.	Reserve: Average for the Ten Years, £6,211,255.	Average of Ten Years = 100.	Proportion of Reserve to Liabilities 42% = 100.	Average of Ten Years 52% = 100.
January . .	£17,920,300	101	£9,147,300	99	51	98
February . .	17,801,200	101	9,545,800	103	53	102
March . .	19,386,000	109	10,186,100	111	53	102
April . .	17,608,300	99	8,510,600	92	48	92
May . .	16,678,500	94	8,681,600	94	52	100
June . .	18,416,100	104	9,902,300	108	54	104
July . .	17,076,700	96	8,927,600	97	52	100
August . .	16,363,800	92	8,897,300	96	54	104
September . .	17,828,200	100	9,510,300	103	53	102
October . .	17,284,100	97	8,189,000	89	47	90
November . .	17,269,900	97	8,843,400	96	52	98
December . .	19,473,000	110	10,193,800	111	52	100

Difference: Highest and Lowest Month, £3,109,000.
Mean of extreme Variations for 1845-54, 9%.

Difference: Highest and Lowest Month, £2,004,000.

Mean of extreme Variations for 1845-54, 11%.

1855-64.	Liabilities: Average for the Ten Years, £20,010,683.	Average of Ten Years = 100.	Reserve: Average for the Ten Years, £8,487,116.	Average of Ten Years = 100.	Proportion of Reserve to Liabilities 42% = 100.	Average of Ten Years 42% = 100.
January . .	£20,019,000	100	£8,031,000	95	40	95
February . .	19,855,100	99	8,756,100	103	44	105
March . .	20,068,300	105	9,429,100	111	45	107
April . .	20,056,900	100	8,187,400	96	41	98
May . .	19,479,800	97	8,395,000	99	43	102
June . .	20,762,500	104	9,444,000	111	45	107
July . .	19,719,400	98	8,410,800	99	43	102
August . .	19,100,100	95	8,435,600	99	44	105
September . .	20,312,200	101	9,018,400	106	44	105
October . .	19,527,500	97	7,405,700	87	38	90
November . .	19,303,600	97	7,490,200	88	39	93
December . .	20,957,800	105	8,842,700	104	42	100

Difference: Highest and Lowest Month, £1,862,000.
Mean of extreme Variations for 1855-64, 12%.

Difference: Highest and Lowest Month, £2,038,000.

Mean of extreme Variations for 1855-64, 12%.

1865-74.	Liabilities: Average for the Ten Years, £25,835,283.	Average of Ten Years = 100.	Reserve: Average for the Ten Years, £11,177,150.	Average of Ten Years = 100.	Proportion of Reserve to Liabilities 43% = 100.	Average of Ten Years 43% = 100.
January . .	£25,749,400	100	£11,323,900	101	44	102
February . .	25,346,400	98	11,862,300	106	47	109
March . .	27,520,100	106	12,128,200	108	44	102
April . .	26,364,900	102	10,407,600	93	39	91
May . .	26,046,800	101	10,062,900	90	38	88
June . .	27,793,600	107	11,961,200	107	43	100
July . .	26,505,000	102	11,146,700	100	42	98
August . .	24,792,300	96	11,172,300	100	45	105
September . .	25,541,700	99	11,758,800	105	46	107
October . .	24,646,600	95	9,688,906	87	39	91
November . .	24,081,900	93	10,643,700	95	44	102
December . .	25,634,700	99	11,959,300	107	47	109

Difference: Highest and Lowest Month, £3,912,000.

Difference: Highest and Lowest Month, £2,449,000.

Mean of extreme Variations for 1865-74, 10%.

Mean of extreme Variations for 1865-74, 10%.

1875-84.	Liabilities: Average for the Ten Years, £30,885,000.	Average of Ten Years = 100.	Reserve: Average for the Ten Years, £13,669,000.	Average of Ten Years = 100.	Proportion of Reserve to Liabilities 44% = 100.	Average of Ten Years 44% = 100.
January . .	£30,544,000	99	£12,102,500	90	40	91
February . .	30,582,000	99	13,453,700	99	31	84
March . .	33,075,000	109	14,648,200	107	43	98
April . .	31,523,000	102	13,513,600	92	43	98
May . .	30,334,000	98	13,332,70*	90	44	105
June . .	31,764,000	103	14,695,300	108	46	105
July . .	32,018,000	104	14,715,800	108	46	105
August . .	30,203,000	98	14,497,200	106	48	109
September . .	30,466,000	99	14,939,000	109	49	111
October . .	30,300,000	100	12,900,600	95	42	95
November . .	28,622,000	93	12,562,400	92	42	100
December . .	29,942,000	97	12,486,300	91	42	95

Difference: Highest and Lowest Month, £5,053,000.

Difference: Highest and Lowest Month, £2,837,000.

Mean of extreme Variations for 1875-84, 8%.

Mean of extreme Variations for 1875-84, 9 3/4%.

CH. IX] MONTHLY AVERAGES, LIABILITIES AND RESERVE 83

TABLE II (continued).

Monthly Averages of Liabilities and Reserve of the Bank of England, 1845-1900,
with Summary Table, 1845-1900.

1885-94.	Liabilities: Average for the Ten Years, £3,199,000.	Average of Ten Years = 100	Reserve: Average for the Ten Years, £15,480,000.	Average of Ten Years = 100	Proportion of Reserve to Liabilities 45% = 100	Average of Ten Years 45% = 100
January . . .	£33,954,000	99	£13,768,000	89	41	91
February . . .	33,814,000	99	16,127,000	104	48	107
March . . .	37,068,000	103	17,056,000	110	46	102
April . . .	34,938,000	102	15,561,000	101	44	98
May . . .	34,370,000	101	15,241,000	98	44	98
June . . .	35,776,000	105	17,200,000	111	48	107
July . . .	36,472,000	107	16,200,000	105	44	98
August . . .	33,477,000	98	15,578,000	102	46	102
September . . .	32,603,000	95	15,854,000	102	49	109
October . . .	33,804,000	99	14,139,000	91	43	98
November . . .	31,867,000	93	14,465,000	93	45	100
December . . .	32,245,000	94	14,572,000	94	45	100

Difference: Highest and Lowest Month, £5,422,000.
Mean of extreme Variations for 1885-94, 75%.

Difference: Highest and Lowest Month, £3,432,000.
Mean of extreme Variations for 1885-94, 11%.

1895-1900.	Liabilities: Average for the Six Years, £5,106,000.	Average of Six Years = 100	Reserve: Average for the Six Years, £5,890,000.	Average of Six Years = 100	Proportion of Reserve to Liabilities 50% = 100	Average of Six Years 50% = 100
January . . .	£52,055,000	101	£25,906,000	100	50	100
February . . .	53,019,000	103	28,437,000	110	53	106
March . . .	55,145,000	107	28,299,000	109	51	102
April . . .	50,927,000	99	25,329,000	98	50	100
May . . .	51,774,000	101	26,120,000	101	51	102
June . . .	52,813,000	103	26,929,000	104	51	102
July . . .	52,809,000	103	25,939,000	100	49	98
August . . .	51,442,000	100	26,136,000	101	51	102
September . . .	50,132,000	98	26,845,000	104	54	108
October . . .	49,860,000	97	23,908,000	92	48	96
November . . .	47,640,000	93	23,770,000	92	50	100
December . . .	48,057,000	94	23,065,000	89	48	96

Difference: Highest and Lowest Month, £7,305,000.
Mean of extreme Variations for 1895-1900, 7%.

Difference: Highest and Lowest Month, £5,372,000.
Mean of extreme Variations for 1895-1900, 10%.

1845-1900.	Liabilities: Average for the Fifty-six Years, £25,478,000	Average of Fifty-six Years = 100	Reserve: Average for the Fifty-six Years, £13,133,000	Average of Fifty-six Years = 100	Proportion of Reserve to Liabilities 46% = 100	Average of Fifty-six Years 46% = 100
January . . .	£28,467,000	102	£12,485,000	95	44	96
February . . .	28,447,000	100	13,715,000	104	48	104
March . . .	30,662,000	108	14,364,000	109	47	102
April . . .	28,758,000	101	12,756,000	97	44	98
May . . .	28,209,000	99	12,747,000	97	45	98
June . . .	29,678,000	104	14,171,000	108	46	104
July . . .	29,192,000	102	13,386,000	102	46	100
August . . .	27,645,000	97	13,260,000	101	48	104
September . . .	27,998,000	98	13,783,000	105	49	106
October . . .	27,885,000	98	11,904,000	91	43	93
November . . .	26,748,000	94	12,190,000	93	46	100
December . . .	28,051,000	99	12,838,000	98	46	100

Difference: Highest and Lowest Month, £3,914,000.
Mean of extreme Variations for 1845-1900, 7%.

Difference: Highest and Lowest Month, £2,460,000.
Mean of extreme Variations for 1845-1900, 9%.

Bank of Germany, of Holland and of Belgium, the amount of specie held by those banks is the first point to be compared with the liabilities. In their case the proportion between these two items is the main thing to be estimated, but with the Bank of England, owing to the division of the account into two parts—the Issue Department and the Banking Department—it is the amount of the reserve, that is to say, the amount of notes and coin held in the Banking Department, which has to be compared with the amount of the liabilities in that department in order to ascertain the specie which the Bank can dispose of in case of any pressure. The reserve of notes represents the greater part of the amount of gold at the command of the Bank; this is not the whole amount of coin and bullion held, but only a part of it. The annual averages of these two items will be found in cols. 21 and 41 of Table 3, pp. 13, 15. The amount of the reserve of the Bank, col. 21 of this table, is considerably smaller than that of the bullion in the Issue Department, col. 41. The columns of proportional figures in Table 3 enable the reader to follow what the course of events has been; thus, by comparing col. 12 with col. 22, p. 13, the reader is able to see at a glance that while the liabilities on deposits and bank post bills have increased nearly $3\frac{1}{2}$ times between the years 1844 to 1900, the proportional numbers running from 100 to 345, the reserve has only increased $2\frac{1}{2}$ times during the same period, the corresponding proportional numbers running from 100 to 251. Col. 23 shows this again in another manner. It contains a statement of the average yearly proportion of the reserve to the liabilities mentioned—namely, those on deposits and bank post bills collectively. The amount of the circulation is omitted from the estimate of the liabilities at this point because it is always assumed that the notes are sufficiently provided for by the specie and securities in the Issue Department. One of the first points which will strike the observer is that on average the amount of the proportion of the reserve to the liabilities became smaller for the years between 1855-94 than it had been in the years 1845-54, and that in the years 1895-1900 the proportion closely resembled that in 1845-54. To make the course of events clear, the averages of the liabilities and the reserve have

been recorded in a separate table—Table 11, pp. 82, 83—which gives the averages for each month in decennial groups with columns of proportional figures showing the proportion of the liabilities in each month to the average for the ten years, and the proportion of the reserve in the same manner for each period of ten years from 1845 to 1900, divided in the same way as all the other tables are throughout this volume. This table shows the proportion per cent. of the reserve to the liabilities during each month, and it contains the monthly proportion of this percentage for each month to the average for the year. The last division of this table, which extends from 1845–1900 contains a statement of the proportion of the reserve to the liabilities during the whole period under notice. A column has been added, which shows the proportion of the reserve to the liabilities for each month, and a further column is supplied which exhibits the fluctuations of the difference between the reserve and the liabilities, taking the average of these as equal to 100.

A study of all these four columns of proportional figures necessary to enable us to follow the history of what has occurred. In doing this, the footnotes to the divisions, 1845–54 to 1891–1900, as to the difference between highest and lowest month and mean of extreme variations, will be an assistance.

On average, it will be seen, by reference to the figures for the fifty-six years from 1844 to 1900, that the liabilities have been at their lowest point in the month of November, and that the proportion of the reserve to the liabilities has been at the lowest point during October and at a low point in November and December. The proportions of the month fluctuations during each year are also interesting. They throw a great extent the financial history of each year.

It will be necessary to compare with this table Table 12, p. 9, which shows the monthly averages of the minimum rate of discount of the Bank of England for the same period, divided into corresponding groups and dealt with in the same manner, and also Table 37, p. 196, which gives the number of variations in the rate of discount, and Table 38, p. 197, which shows the lowest and highest rate charged and the extent of the fluctuations during each year. These two tables last mentioned contain similar information for the Banks of France, Germany,

Holland, and Belgium. They will be useful also when we come to consider the rates which are charged by the other great banks of Europe, but at the present time we will confine our observations to the Bank of England.

It will be observed that

The Proportions of the Reserve to the Liabilities, 1845-1900,
Table 11, pp. 82, 83, were—

1845-54	.	.	.	.	52	per cent.
1855-64	,	.	.	.	42	"
1865-74	.	.	.	.	43	"
1875-84	.	.	.	.	44	"
1885-94	.	.	.	.	45	"
1895-1900	.	.	.	.	50	"

Thus in the last period (1895-1900) the proportion of the reserve to the liabilities corresponds closely to what it was in the first period (1845-54).

The number of variations in the rate charged by the Bank of England was the same in each of these two periods, 1845-54 and in 1895-1900. The particulars are as follows:—

Number of Variations in the Rate of Discount, 1845-1900, Table 13, p. 98.

1845-54	.	.	.	.	27
1855-64	.	.	.	.	89
1865-74	.	.	.	.	113
1875-84	.	.	.	.	66
1885-94	.	.	.	.	77
1895-1900	.	.	.	.	27

The correspondence of the number of variations in the last and in the first divisions of this table is fortuitous. The number of years in the first division was ten, and in the last only six. The tendency to fluctuation was greater in the later period than in the earlier one; it likewise increased much in the intermediate years.

The variations between the highest and lowest rates have also been considerable. They have increased in intensity in the same manner as the fluctuations have increased in number.

Mean of the Extreme Variations between 1845-1900, Table 12, p. 97.

1845-54	.	.	.	7	per cent.
1855-64	,	.	.	11·5	" "
1865-74	.	.	.	17·5	" "
1875-84	.	.	.	18·5	" "
1885-94	"	.	.	25	" "
1895-1900	.	.	.	21·5	" "

The greatest fluctuation in the corresponding period is as follows. The year in which it occurred is also mentioned in this case:—

Greatest Fluctuation in Rate during Periods mentioned, Table 38, p. 197.

1845-54	.	.	.	1847	.	.	.	5 per cent.
1855-64	.	.	.	1858	.	.	.	5·5 "
1865-74	.	.	.	1866	.	.	.	6·5 "
1875-84	.	.	.	1878	.	.	.	4 "
1885-94	.	.	.	1889	.	.	.	3·5 "
1895-1900	.	.	.	{ 1899 } 1900	.	.	.	3 "

The difference between the rate charged in the highest and lowest month of the same groups and the mean of the extreme variations for the same is shown in the following statement. These also show an increase in intensity.

Fluctuations between Rate in Months in Periods mentioned, Table 12, p. 97.

Year.	Difference between Highest and Lowest Month. £ s. d.	Mean of the Extreme Variations.
1845-54	9 5 . .	7 per cent.
1855-64	1 1 7 . .	11·5 "
1865-74	1 6 6 . .	17·5 "
1875-84	1 3 8 . .	18·5 "
1885-94	1 12 1 . .	25 "
1895-1900	1 6 1 . .	21·5 "

On the whole, the fluctuations between one month and another have tended to be more severe of recent years, though they were less severe in 1895-1900 than in 1885-94.

While there can be no doubt that the proportion of the reserve to the liabilities is connected in a general way with the rate that is charged, yet it will be seen from this summary that it is not the sole cause which regulates the fluctuations in the rate. The general principle, however, applies—the larger the reserve has been, the smaller the number of fluctuations, and in a degree the severity of those fluctuations corresponds. It should be noted that of late years, since 1865, the differences between the rates charged in the highest and lowest month have largely increased. Taking the period as a whole, and arranging the months for the period 1845-1900 from the lowest month to the highest, the particulars are as follows:—

*Average Rate for each Month, 1845-1900, Table 12, p. 97,
arranged from lowest month to highest.*

Fifty-six Years, 1845-1900.	Average Rate for Months named.	Average Rate, £3 12s. = 100.
	£ s. d.	
July	3 4 6	89
August	3 6 4	92
June	3 6 7	92
September	3 6 7	92
April	3 6 10	93
March	3 9 0	96
May	3 11 0	99
February	3 11 3	99
October	3 17 3	108
January	3 19 1	110
December	4 1 10	113
November	4 3 8	116

As the memories of many men of business hardly go back as far as the last severe crisis, the Act required to indemnify the Bank of England in respect of their issues of notes in excess of the legal limit made in November, 1857, is printed at the end of this chapter, and with it the bill introduced into the House of Commons in 1873 by Mr. Lowe, afterwards Lord Sherbrooke, the Chancellor of the Exchequer. The first of these documents will show the force of the legal impediments to an extension of the note issue of the Bank beyond the limit fixed by the Act of 1844, and the second what was considered necessary in 1873 to justify an extension of the limit.

That the bill proposed by Mr. Lowe did not pass into law need not be a matter of regret. The requirements of the bill were pedantic and unpractical. The imposition of a charge for discounts of a rate of 12 per cent., a rate never yet authoritatively attained during our sharpest panics, was enough to mark the proposal as impracticable. In times of pressure the right course is to endeavour to allay alarm, not to inflame it. With any charge beyond 5 per cent. the public becomes uneasy. A moderate rate for the excess issue like that charged at the Bank of Germany (Chapter XVI., p. 154) is more advantageous both for the Bank, the revenue, and the public.

The proportion of the reserve to the liabilities and to

the bankers' balances was as follows during the sharpest pressure of the crises of 1847, 1857, and 1866:—

October 30th, 1847.—Reserve 12 per cent. of the liabilities, and only sufficient to meet 81 per cent. of the bankers' balances. Bank rate 8 per cent.

November 11th, 1857.—Reserve 7 per cent. of the liabilities, and only sufficient to meet 30 per cent. of the bankers' balances. Bank rate 10 per cent.

May 16th, 1866.—Reserve 5 per cent. of the liabilities, and only sufficient to meet 15 per cent. of the bankers' balances. Bank rate 10 per cent.

The increased severity of each crisis is marked in the smaller proportion of the reserve both to the liabilities and the bankers' balances on each of the later occasions. The principle of the Act of 1844 was actually infringed only in the panic of 1857.

The particulars of what occurred in 1857 are given, as incorrect statements are not infrequent. Those for 1847, 1866, and 1890 are added by way of illustration.

Year and Month.	Gold Bullion in Issue Department of Bank.	Reserve of Notes.	Rate of Discount percent.	Year and Month.	Gold Bullion in Issue Department of Bank.	Reserve of Notes.	Rate of Discount percent.
1847.							
Oct. 16	£ 7,990,000	2,630,000	5½	Dec. 16	8,926,000	5,757,000	10
" 23	7,865,000	1,547,000	8	" 23	10,209,000	7,426,000	10
" 30	8,000,000	1,177,000	8	" 30	10,905,000	6,065,000	8
Nov. 6	8,426,000	2,030,000	8	1866.			
" 13	8,848,000	2,798,000	8	Mar. 21	13,554,000	7,918,000	6
" 20	9,526,000	4,228,000	8	" 28	13,503,000	6,881,000	6
1857.				Apr. 4	13,486,000	6,153,000	6
Oct. 3	10,078,000	4,606,000	5½	" 11	13,363,000	6,318,000	6
" 10	8,539,000	4,024,000	6	" 18	13,042,000	5,741,000	6
" 17	8,925,000	3,217,000	7	" 25	13,005,000	5,844,000	6
" 24	8,777,000	3,486,000	8	May 2	12,712,000	4,839,000	6
" 31	8,155,000	2,258,000	8	" 9	12,295,000	4,950,000	8
Nov. 4	7,947,000	2,155,000*	8	" 16	11,851,000	7,31,000	10
" 11	6,666,000	958,000	10	" 23	11,300,000	831,000	10
" 18	6,080,000	1,148,000*	10	" 30	11,434,000	415,000	10
" 25	6,784,000	1,919,000	10	June 6	12,020,000	2,167,000	10
Dec. 2	6,896,000	2,268,000	10	" 13	13,696,000	2,729,000	10
" 9	7,568,000	3,900,000	10	" 20	14,174,000	4,067,000	10†

* £2,000,000 was, under authority of Treasury Letter, Nov. 12th, 1857, added to the securities in the Issue Department in the returns from Nov. 18th to Dec. 23rd, 1857, both inclusive. The strict limits of the Act of 1844 were only exceeded in the returns of 18th and 25th Nov., 1857.—Palgrave, *Dictionary of Political Economy*, vol. i. art. by Mr. W. Fowler, "Crises," pp. 469-6.

† Reduced to 8 per cent. August 6th.

FIGURES FROM NEAREST RETURN.

Date.	Gold Bullion in Bank in both departments.	Reserve of Notes. ^c	Rate of Discount per cent.
1890.	£	£	
Oct. 15	19,793,000	10,275,000	5
" 20	19,759,000	10,600,000	5
Nov. 12	19,137,000	10,024,000	6
" 19	22,558,000	13,378,000	6
" 26	24,683,000	15,309,000	6
Dec. 10	24,832,000	15,904,000	5
" 17	24,375,000	15,797,000	5
" 24	23,338,000	14,205,000	5

The general averages of the proportions of the reserve to the liabilities and of the London bankers' balances to the reserve when the various rates specified were charged between the years 1844 and 1878 are given in the table which follows. This statement has not been carried further, because since the amounts of the London bankers' balances have not been published since 1877, it is not possible now to make any similar statement up to a later date complete. It will be observed, however, that in general the principle that a low figure for the reserve accompanies a high rate of interest holds good. There does not appear to be any corresponding connection between the proportions which the bankers' balances bear to the reserve and the rate charged.

GENERAL AVERAGES OF THE PROPORTIONS OF THE RESERVE
TO THE LIABILITIES, AND OF THE LONDON BANKERS'
BALANCES TO THE RESERVE, WHEN THE VARIOUS RATES
SPECIFIED WERE CHARGED—1844 TO 1878.

Bank Rate of Discount per cent.	Times Charged.	Average Proportion per Cent. of Reserve to Liabilities.	Average Proportion per Cent. of London Bankers' Balances to Reserve.
10	2	18	86
9	5	28	73
8	15	30	78
7	21	32	67
6½	2	29	53
6	28	36	61
5½	6	37	56
5	33	36	67
4½	20	43	58
4	40	56	64
3½	30	45	56
3	35	45	57
2½	18	50	50
2¼	1	59	98
2	8	50	78
Number of changes in rate } 264		—	—

The following is the Act required to indemnify the Bank of England against the legal risks it ran by exceeding the limits of issue prescribed by the Bank Act of 1844 in 1857:—

Anno Vicesimo Primo Victoriae Regina, Cap. i.

An Act to indemnify the Governor and Company of the Bank of *England* in respect of certain Issues of their Notes, and to confirm such Issues, and to authorize further Issues for a Time to be limited. [12th December, 1857.]

Whereas by the Act of the Session holden in the Seventh and Eighth Years of Her Majesty, Chapter Thirty-two, "to regulate the Issue of Bank Notes and for giving to the Governor and Company of the Bank of *England* certain Privileges for a limited Period," the Governor and Company of the Bank of *England* are prohibited from issuing Bank of *England* Notes either in the Banking Department of the Bank of *England* or to any Persons or Person whatsoever, save in exchange for other Bank of *England* Notes, or for Gold Coin, or for Gold or Silver Bullion received or purchased for the Issue Department of the said Bank under the Provisions of that Act, or in exchange for Securities acquired and taken in the said Issue Department under the Provisions therein contained: And whereas under the said Act and an Order in Council issued under the Provisions thereof the Amount of Securities to be acquired and taken in the said Issue Department stands limited not to exceed the Sum of Fourteen million four hundred and seventy-five thousand Pounds: And whereas by a Letter dated the Twelfth Day of November last the First Lord of the Treasury and the Chancellor of the Exchequer informed the Governor and the Deputy Governor of the Bank of *England* that Her Majesty's Government had observed with great Concern the serious Consequences which had ensued from the recent Failure of certain Joint Stock Banks in *England* and *Scotland*, as well as of certain large mercantile Firms chiefly connected with the *American* Trade; that the Discredit and Distrust which had resulted from these Events, and the Withdrawal of a large Amount of the Paper Circulation authorized by the existing Bank Acts, appeared to Her Majesty's Government to render it necessary for them to inform the Bank of *England* that if they should be unable in the present Emergency to meet the Demands for Discounts and Advances upon approved Securities without exceeding the Limits of their Circulation prescribed by the Act of One thousand eight hundred and forty-four, the Government would be prepared to propose to Parliament upon its meeting a Bill of Indemnity for any Excess so issued; and that, in order to prevent that temporary Relaxation of the Law being extended beyond the actual Necessities of the Occasion, Her Majesty's Government were of opinion that the Bank Terms of Discount should not be reduced below their then present Rate; And whereas the Governor and Company

of the Bank of *England* have since the said Twelfth Day of *November* One thousand eight hundred and fifty-seven issued Bank of *England* Notes in exchange for Securities acquired and taken in the said Issue Department beyond the Amount limited by Law, and it is expedient that the Acts of the said Governor and Company in relation to the Matters aforesaid should be confirmed, and that the Restriction on the Amount of the Securities to be acquired and taken in the said Issue Department should be suspended for a limited Time: Be it therefore enacted by the Queen's most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same, as follows:

Issues of
Bank of
England
Notes
since 12th
Nov., 1857,
in excess
of those
authorized
by Law
confirmed
and made
valid.

I. All such Issues of Bank of *England* Notes as may have been made by the said Governor and Company, or by their Order or Direction, since the said Twelfth Day of *November* One thousand eight hundred and fifty-seven, although beyond the Amount authorized by Law, and all Acts necessary for the making of such Issues, and for the acquiring and taking since the said Twelfth Day of *November* One thousand eight hundred and fifty-seven Securities in the Issue Department of the Bank of *England* beyond the Amount authorized by Law, shall be confirmed and made valid; and the said Governor and Company, and all Persons who have been concerned in such Issues or in doing or advising any such Acts as aforesaid, are hereby indemnified and discharged in respect thereof, and all Indictments and Informations, Actions, Suits, Prosecutions, and Proceedings whatsoever commenced or to be commenced against the said Governor and Company or any Person or Persons in relation to the Acts or Matter aforesaid, or any of them, are hereby discharged and made void.

The Re-
striction
on the
Amount of
Securities
to be taken
in the Issue
Depart-
ment
suspended.

II. So much of the said Act of the Seventh and Eighth Years of Her Majesty as limits the Amount of the Securities to be acquired and taken in the Issue Department of the Bank of *England* shall be and be deemed to have been suspended as from the Twelfth Day of *November* One thousand eight hundred and fifty-seven, and shall continue suspended until the Expiration of Twenty-eight Days after the First Meeting or Sitting of Parliament in the Year One thousand eight hundred and fifty-eight, subject to the Proviso herein-after contained, and during such Suspension the Provisions of the said Act in relation to the Issue of Bank of *England* Notes shall be construed and take effect as if the Restriction on the Amount of Securities in the said Issue Department, and the Prohibition of the Increase of such Amount and of the Issue of additional Bank of *England* Notes thereon, had not been contained in the said Act: Provided always, that if before the Expiration of the Time herein-before limited the Governor and Company of the Bank of *England* give public Notice that they have reduced the minimum Rate of Interest required by them below the Rate of *Ten per Centum per Annnum*, the said Suspension shall cease.

III. Upon or before the Expiration or Cesser of the Suspension aforesaid the Excess of Issues herein-before confirmed shall be reduced to the Amount which would have been authorized by Law if this Act had not been passed; and, subject to the Indemnity and Discharge hereby given, all the Provisions of the said recited Act shall, after such Expiration or Cesser, be and remain in full Force.

The Issues
in excess
to be re-
duced on
or before
the Expi-
ration of
the Sus-
pension.

The bill proposed by Lord Sherbrooke (then Mr. Robert Lowe) in 1873 to allow the Bank of England to exceed in certain contingencies the limits fixed for the issue by the Act of 1844 is printed here in full.

(36 Vict.) *Bank of England Notes.*

A Bill to provide for authorising in certain contingencies a temporary increase of the amount of Bank of England Notes issued in exchange for securities. A.D. 1873.—

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

i. Whenever the First Lord of Her Majesty's Treasury and the Chancellor of the Exchequer after communication with the Governor and Deputy Governor of the Bank of England are satisfied—

Power to
authorise
temporary
and special
issue of
Bank of
England
notes.

- (1) That the minimum rate of interest then being charged by the Governor and Company of the Bank of England on discounts and temporary advances is not less than *twelve per cent.* per annum; and
- (2) That the foreign exchanges are favourable to this country; and
- (3) That a large portion of the existing amount of Bank of England and other bank notes in circulation is rendered ineffective for its ordinary purpose by reason of internal panic;

they may, by order under their hands, empower the issue department of the Bank of England to make, in excess of the authorised issue, a special and temporary issue of Bank of England notes, by delivering the same into the banking department in exchange for and on the credit of an equal amount of Government securities to be transferred to the issue department, and the said Governor and Company shall pay interest into the Exchequer on the amount of notes so issued by them at such rate, being not less than *twelve per cent.* per annum, as may from time to time be fixed by the First Lord of the Treasury and Chancellor of the Exchequer, and in addition thereto the amount of any further profit which they may derive from the said issue.

Order may be rescinded or varied.

2. The First Lord of the Treasury and the Chancellor of the Exchequer may, if they think it expedient, by order under their hands, rescind and vary any order made in pursuance of this Act, and make any new order in pursuance of this Act.

Remuneration to Bank for expense of special issue.

3. *There shall be paid to the said Governor and Company such sum, not exceeding the rate of two per cent. on the amount of such issue, as may be agreed upon between the said First Lord of the Treasury and Chancellor of the Exchequer on the one part, and the said Governor and Deputy Governor of the Bank of England on the other part, to be a fair allowance to the Bank for the risk, expense, and trouble incurred by it in making such issue.*

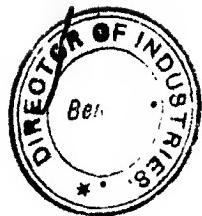
Publication and return of order to Parliament.

4. A copy of every order made under this Act shall be forthwith published in such manner as the First Lord of the Treasury and the Chancellor of the Exchequer consider best calculated for giving public and general notice thereof, and shall be laid before both Houses of Parliament within fourteen days after it is made, or if Parliament be not then sitting, within fourteen days after the then next meeting of Parliament.

Construction of Act and short title.

5. This Act may be cited as the Bank of England Notes Act, 1873, and shall be construed as one with the Act of the session of the seventh and eighth years of the reign of Her present Majesty, chapter thirty-two, intituled "An Act to regulate the issue of bank notes, and for giving to the Governor and Company of the Bank of England certain privileges for a limited period."

[Sec. 3, in italics, is thus in the original print of the Bill.]



CHAPTER X

VARIATIONS IN THE RATE CHARGED BY THE BANK OF ENGLAND FROM 1844 TO 1900

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THOUGH the rate of discount charged by the Bank of England is, perhaps, no longer at the present time so exact a guide to the movements of the money market as formerly, yet it is still a most valuable index to the fluctuations in that market, and to the course of monetary affairs generally, and an examination into the variations of the rate charged is a necessary part of an analysis of the transactions of the Bank. The tables which will be found in this chapter have been prepared for the purpose of giving information on this point. Of these tables, the first, No. 12, p. 97, gives the average rate of discount charged month by month by the Bank of England from 1845 to 1900, in groups of ten years, 1845-54, 1855-64, 1865-74,

1875-84, 1885-94, for the six years 1895-1900, and for the whole period, 1845 to 1900. The statement has been subdivided thus into short periods to facilitate the study of the fluctuations in the rate by those who desire to give the subject close attention. It also shows the proportion which the rate charged in each month bore to the average rate of the decade. Table No. 13, pp. 98, 99, gives at one view a statement of the changes in the Bank rate from the date in 1844, when the Bank Act came into operation, to the close of the year 1900. It gives the number of changes of the rate in each year, and the total number of days at each rate in each year. Table 27, p. 196, shows the number of variations in the rate and the years in which these variations occurred, and Table 38, p. 197, shows the range of variation in each year. The Table 14, p. 100, gives the number of days at each rate, arranged from the lowest rate to the highest; and the number of days at each rate, arranged from the greatest number of days which each rate lasted to the smallest.

These tables thus form, collectively, a kind of rough chart, showing the course which the market value of money has taken during the entire period over which they extend. Some curious information can be gathered from examining them. First, there is a great difference, as will be seen from Table 13, pp. 98, 99, between the course of business in one year and another. In two years, 1851 and 1895, no change is marked; in four years, 1844, 1846, 1849, and 1850, there is but one alteration of the rate. It will be noted that these years in which so little fluctuation took place all occurred during the first seven years, between 1844 and 1850. By way of contrast, in one year, 1873, no less than twenty-four changes, one nearly every fortnight, are marked. Next, if we look down the column in the table giving the total number of changes in the Bank rate, we shall be struck with the fact of how much that number has increased. As far down as the year 1859 the changes are comparatively few in number. Yet the period from 1844 to 1859 included two panics, those of 1847 and 1857, both of them of considerable severity. In both of these years, 1847 and 1857, the changes in the Bank rate amounted to nine. This was considered in those days an almost unprecedented

TABLE 12.

Monthly Averages of Minimum Rate of Discount of Bank of England 1845-1900,
in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of
Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	1845-54.		1855-64.		1865-74.		1875-84.	
	Average for the Ten Years, £3 3s. 5d.	Avg. of Ten Years = 100.	Average for the Ten Years, £4 12s. 9d.	Average of Ten Years = 100.	Average for the Ten Years, £3 16s. 1d.	Avg. of Ten Years = 100.	Average for the Ten Years, £3 3s. 1d.	Average of Ten Years = 100.
January .	£ 5 8	96	£ 15 8	103	£ 17 8	101	£ 17 5	121
February .	3 6 0	96	4 16 5	104	3 12 9	96	3 5 11	103
March .	3 6 0	96	4 12 5	100	3 10 1	92	3 1 7	96
April .	3 7 1	98	4 11 2	98	3 11 11	94	2 15 8	87
May .	3 7 7	99	4 15 8	103	4 3 8	110	2 16 3	88
June .	3 8 4	100	4 9 6	97	3 19 8	105	2 15 2	85
July .	3 8 2	99	4 4 5	91	3 13 10	97	2 14 6	85
August .	3 7 10	99	4 3 2	90	3 13 11	97	2 15 9	87
September .	3 7 8	99	4 4 6	91	3 2 2	82	3 1 3	96
October .	3 10 10	104	4 12 4	99	3 19 11	105	3 16 10	111
November .	3 15 1	110	5 4 9	113	4 8 8	117	3 18 2	122
December .	3 10 10	104	5 3 3	111	3 19 1	104	3 15 10	119
Difference ; Highest and Lowest Month, 9s. 5d.	Difference: Highest and Lowest Month, £1 1s. 7d.		Difference: Highest and Lowest Month, £1 ts. 6d.		Difference: Highest and Lowest Month, £1 3s. 8d.		Difference: Highest and Lowest Month, £1 3s. 8d.	
Mean of extreme Variations for 1845-54, 7%.	Mean of extreme Variations for 1855-64, 11·5%.		Mean of extreme Variations for 1865-74, 17·5%.		Mean of extreme Variations for 1875-84, 18·5%.		Mean of extreme Variations for 1895-1900, 13·5%.	

Month.	1885-94.		1895-1900.		1845-1900.	
	Average for the Ten Years, £3 3s. 1d.	Average of Ten Years = 100.	Average for the Six Years, £3 or 4d.	Average of Six Years = 100.	Average for the Fifty-six Years, £3 12s.	Average Rate of Fifty-six Years = 100.
January .	£ 4 1 1	128	£ 6 5	110	3 19 1	110
February .	3 6 1	105	2 16 5	94	3 11 3	99
March .	2 18 6	93	2 16 8	94	3 9 0	96
April .	2 13 2	82	2 17 8	96	3 6 10	93
May .	2 14 2	86	2 17 4	95	3 11 0	99
June .	2 10 10	87	2 10 7	84	3 6 7	92
July .	2 9 0	78	2 10 10	84	3 4 6	89
August .	2 16 6	89	2 13 6	89	3 6 4	92
September .	3 4 4	92	2 15 5	92	3 6 7	92
October .	3 10 10	111	3 9 2	115	3 17 3	108
November .	3 16 9	122	3 13 4	121	4 3 8	116
December .	3 17 4	122	3 16 8	127	4 1 10	113
Difference : Highest and Lowest Month, £1 12s. 1d.	Difference: Highest and Lowest Month, £1 6s. 1d.		Difference: Highest and Lowest Month, £1 1s. 2d.		Difference: Highest and Lowest Month, 10s. 2d.	
Mean of extreme Variations for 1885-94, 25%.	Mean of extreme Variations for 1895-1900, 21·5%.		Mean of extreme Variations for 1845-1900, 13·5%.		Mean of extreme Variations for 1845-1900, 13·5%.	

TABLE 13.

BANK OF ENGLAND

Table of the Changes in the Rate of Discount Charged by the
since 5th September, 1844 (when the Bank

Years.	Number of Changes.			2%	2½%	3%	3½%	4%
	Rise.	Fall.	Total.	Days.	Days.	Days.	Days.	Days.
1844	—	1	1	—	—	117	—	—
1845	2	—	2	—	—	289	21	55
1846	—	1	1	—	—	—	126	239
1847	6	3	9	—	—	—	14	7
1848	—	3	3	—	—	—	59	140
1849	—	1	1	—	—	39	326	40
1850	1	—	1	—	—	360	5	—
1851	No change	—	—	—	—	—	365	—
1852	—	2	2	253	6	113	—	—
1853	6	—	6	—	14	133	91	14
1854	1	1	2	—	—	—	84	7
1855	4	4	8	—	—	—	—	—
1856	2	5	7	—	—	—	—	—
1857	6	3	9	—	—	22	301	7
1858	—	6	6	—	—	288	35	7
1859	2	3	5	—	—	19	12	—
1860	8	3	11	—	—	—	54	49
1861	3	8	11	—	—	—	—	226
1862	2	3	5	98	—	147	120	—
1863	8	4	12	—	—	—	31	12
1864	7	8	15	—	—	—	42	21
1865	8	8	16	—	—	—	—	98
1866	5	9	14	—	—	—	—	42
1867	—	3	3	159	—	56	112	38
1868	2	—	2	324	—	14	28	—
1869	3	4	7	—	—	77	183	21
1870	4	6	10	—	—	93	223	9
1871	4	6	10	70	28	124	66	12
1872	9	5	14	—	—	—	123	50
1873	11	13	24	—	—	—	35	61
1874	6	7	13	—	—	42	70	81
1875	5	7	12	56	—	21	84	43
1876	1	4	5	255	—	—	14	62
1877	4	3	7	170	—	7	100	39
1878	6	4	10	56	—	28	91	21
1879	1	4	5	210	—	28	97	14
1880	1	1	2	—	—	175	101	—
1881	4	2	6	—	—	112	90	42
1882	3	3	6	—	—	—	147	42
1883	1	—	6	—	—	—	165	147
1884	4	3	7	112	—	77	80	7
1885	2	5	7	168	—	14	42	64
1886	4	3	7	78	—	77	62	56
1887	2	5	7	98	—	14	49	77
1888	4	5	9	56	—	91	91	156
1889	4	4	8	—	—	112	98	33
1890	4	7	11	—	—	—	70	42
1891	4	6	10	—	—	84	126	98
1892	1	3	4	176	—	21	149	—
1893	6	6	12	—	—	147	134	21
1894	—	2	2	312	—	21	32	42
1895	No change	—	—	365	—	—	—	—
1896	3	—	3	254	—	14	28	70
1897	2	4	6	133	—	6	141	21
1898	3	3	6	—	—	84	146	128
1899	4	2	6	—	—	—	161	96
1900	1	5	6	—	—	—	35	19
				184	216	400	3,409	2,698
				28	2,997	4,907	1,739	

TABLE 13—*continued.*

MINIMUM RATE OF DISCOUNT, 1844-1900.

Bank of England, and the Number of Days at each Rate in each Year,
Act came into Operation), to 31st December, 1900.

4½%	5%	5½%	6%	6½%	7%	8%	9%	10%	Total.	Years.
Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	
—	—	—	—	—	—	—	—	—	117	1844
—	—	—	—	—	—	—	—	—	365	1845
—	—	—	—	—	—	—	—	—	365	1846
—	127	56	46	—	10	28	—	—	365	1847
—	27	—	—	—	—	—	—	—	365	1848
—	—	—	—	—	—	—	—	—	365	1849
—	—	—	—	—	—	—	—	—	365	1850
—	—	—	—	—	—	—	—	—	365	1851
—	—	—	—	—	—	—	—	—	365	1852
14	93	—	—	—	—	—	—	—	365	1853
—	281	84	—	—	—	—	—	—	365	1854
84	102	14	—	—	74	—	—	—	365	1855
98	35	—	20	14	199	—	—	—	365	1856
—	—	84	127	77	4	24	4	45	365	1857
—	14	—	7	—	—	7	—	—	365	1858
28	—	—	—	—	—	—	—	—	365	1859
33	63	—	13	—	—	—	—	—	365	1860
14	49	—	91	—	52	35	—	—	365	1861
—	—	—	—	—	8	21	—	—	365	1862
—	25	—	27	—	—	102	81	77	365	1863
—	—	—	106	—	—	—	—	—	365	1864
52	39	14	49	—	50	—	—	—	365	1865
42	21	—	56	—	37	59	1	96	365	1866
—	—	—	—	—	—	—	—	—	365	1867
—	—	—	—	—	—	—	—	—	365	1868
35	—	—	—	—	—	—	—	—	365	1869
7	7	7	7	—	—	—	—	—	365	1870
—	40	—	—	—	—	—	—	—	365	1871
7	47	—	44	—	19	—	—	—	365	1872
43	45	—	57	—	22	13	13	—	365	1873
8	14	—	31	—	—	—	—	—	365	1874
—	7	—	7	—	—	—	—	—	365	1875
—	21	—	—	—	—	—	—	—	365	1876
—	49	—	—	—	—	—	—	—	365	1877
—	103	—	38	—	—	—	—	—	365	1878
—	16	—	—	—	—	—	—	—	365	1879
—	—	—	—	—	—	—	—	—	365	1880
—	86	—	—	—	—	—	—	—	365	1881
—	155	—	21	—	—	—	—	—	365	1882
—	25	—	—	—	—	—	—	—	365	1883
—	55	—	—	—	—	—	—	—	365	1884
—	28	—	—	—	—	—	—	1	365	1885
—	15	—	—	—	—	—	—	—	365	1886
—	34	—	—	—	—	—	—	—	365	1887
—	88	—	—	—	—	—	—	—	365	1888
—	104	—	—	1	—	—	—	—	365	1889
7	105	—	78	—	—	—	—	—	365	1890
—	8	—	—	—	—	—	—	—	365	1891
—	—	—	—	—	—	—	—	—	365	1892
—	21	—	—	—	—	—	—	—	365	1893
—	—	—	—	—	—	—	—	—	365	1894
—	—	—	—	—	—	—	—	—	365	1895
—	—	—	—	—	—	—	—	—	365	1896
—	—	—	—	—	—	—	—	—	365	1897
—	2	56	—	31	—	—	—	—	365	1898
—	7	7	—	11	—	—	—	—	365	1899
—	481	2,12	59	868	91	577	268	95	141	20,570

TABLE 14.

Bank of England—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the highest number to the smallest.

Number of Days (20,570).	Rate Per Cent.	Number of Days = 1,000.
4,907	3	239
3,409	2	166
2,997	2½	146
2,698	4	131
2,012	5	98
1,739	3½	84
868	6	43
577	7	28
481	4½	23
268	8	13
259	5½	13
141	10	7
95	9	5
91	6½	4
28	2½	—
<hr/>		
20,570		1,000

Bank of England—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the lowest rate to the highest.

Rate Per Cent.	Number of Days (20,570).	Number of Days = 1,000.
2	3,409	166
2½	28	—
2¾	2,997	146
3	4,907	239
3½	1,739	84
4	2,698	131
4½	481	23
5	2,012	98
5½	259	13
6	868	43
6½	91	4
7	577	28
8	268	13
9	95	5
10	141	7
<hr/>		
20,570		1,000

number of variations. If we exclude these two years, we shall find in the fifteen years under observation, namely, those from 1844 to 1859, only two years, 1855 and 1856, in the first of which the number of changes was eight, in the second seven; two years besides, 1853 and 1858, in which they were six in number; in one year, 1859, there were five changes; in one year, 1851, no change whatever was recorded; in the remaining seven years the number of changes varied from one to three. But from 1860 to 1874 a totally different state of things prevails. If we carry our eyes down this later part of the column we shall find that, with the exception of the year 1862, in which there were five changes, no year between 1860 and 1874 has less than ten changes recorded as occurring in it, with the exception of those years which, like 1867 and 1868, were years of recovery from great commercial depression. In 1872 fourteen changes were recorded; in 1873, as mentioned before, no less than twenty-four; and in 1874 thirteen.

Between 1875 and 1900 the yearly fluctuations were not so numerous. Both in 1875 and 1893 there were twelve, in 1890 there were eleven, in 1891 ten, in 1888 nine, in 1889 eight. In none of the remaining years did the changes exceed six or seven. In 1894 there were only two; in 1895, as in 1851, there were none. The diminution in the number of fluctuations is a help to trade, as is a low rate of interest.

If we examine Table 14, p. 100, in which the facts shown in Table 13, pp. 98, 99, have been brought together for facility of reference, we shall find that during the greater part of the time between 1844 and 1900 the rate charged by the Bank has been, comparatively speaking, a low one. Out of 20,570 days under consideration, the Bank rate stood at 3 per cent., or below it, during 11,341—that is to say during more than half of the whole time. And if we take the rates up to 4 per cent. inclusive, which we may call moderate rates, as even 4 per cent. can hardly be called a high rate, we shall find that they comprise more than three-quarters of the whole. A column has been added to the table for facility of comparison, showing the proportionate part of the time which each rate has stood at,—reckoning the whole period as equalling 1,000. This column shows that during more than half of the whole time a rate of

3 per cent. and below has been charged, and that rates varying from $4\frac{1}{2}$ per cent. upwards to 10 per cent. have been in force during one-fifth of the whole period. The whole results may be summarised thus: From 1844 to 1900 a low rate, from 2 per cent. to $2\frac{1}{2}$ per cent., was charged during 6,434 days, being more than one-quarter of the time; a moderate rate, not exceeding 3 per cent., was charged during 11,341 days, more than half the time; a rate not exceeding 4 per cent. was charged during 15,778 days, more than three-quarters of the time; and during 4,792 days, little more than one-fifth of the time, a high rate of $4\frac{1}{2}$ per cent. and upwards was charged.

If we look to table No. 13, pp. 98, 99, again, we shall see the history of the difficult times between 1855 and 1873 expressed very clearly, the years in which the Bank rate exceeded 6 per cent., ranging from $6\frac{1}{2}$ per cent. to 10 per cent., all, except 1847, falling within that period. Earlier than 1854 low rates generally prevailed. If we except the panic year, 1847, we shall never find, down to the year 1853 inclusive, the rate exceeding 5 per cent.; and indeed a 5 per cent. rate was then most rarely attained. In those days a 4 per cent. rate was one of unusual severity. In the latter part of the table higher rates have become more frequent. Though it may have been but for a week, yet during thirty-six out of the fifty-six years over which this table extends the Bank rate has reached 5 per cent.; even in such a year as 1876, during which the average rate for the year was but a little more than half 5 per cent., being only £2 12s. 1d. for the twelve months, and in 1877, in which the yearly average was only £2 18s., the same result occurred. Thus also during thirty-eight years the Bank rate has stood for some time, and frequently a long time, at 4 per cent. Yet the fact that 4 per cent. and even a lower rate has been charged for a considerable part of the year has not prevented the average for the whole year being high. Thus in 1866, when for a few days as low a rate as $3\frac{1}{2}$ per cent. was charged, the average rate for the whole year was £6 19s., the highest recorded. Again, in 1873 the rate fluctuated between 3 per cent. and 9 per cent., with an average of £4 15s. 10d. Between 1873 and 1900, however, the rate has never exceeded 6 per cent., though it has stood

at that figure in eight years, namely, in 1874, 1875, 1878, 1882, 1889 (for one day), 1890, 1899, and 1900.

During the years from 1891 to 1897 low rates generally prevailed. In 1895 the rate stood at $\frac{1}{2}$ per cent. without change, and including that year, and 1894, 1896, and 1897 2 per cent. was charged for 1064 days, equivalent to nearly three years out of the seven between 1894 and 1900. This, however, has not prevented the fluctuations in the rate from being frequent and also distinctly marked. The variations have also become more extreme during the years from 1885 to 1900.

The special circumstances connected with the Chinese-Japanese War indemnity and the large deposits hence made with the Bank of England in 1895-6 partly account for the abnormally low value of money at that time. This subject is mentioned in Chapter II., p. 18, in reference to the principal divisions of accounts of the Bank of England.

The further consideration of this subject—the number, the extent, and the severity of the fluctuations in the rate charged at the Bank of England—will be continued in Chapter XX., p. 203, in which the same points will be taken up in reference to all the five banks whose operations are discussed in this volume. Meanwhile it is only right to refer to one cause of the greater susceptibility to fluctuation in the value of money in this country of recent years, namely, the vast growth of loanable capital in the country, and of the money held by banks and discount houses, in comparison with the reserve of ready money in the form of hard cash which is held against these liabilities. The real reserve in actual cash of the banks of the country is included in the reserve held by the Bank of England, and though that reserve, as compared with the amounts held thirty years since, has been augmented of late, yet the reserve of the Bank has not been increased in proportion to the demands which may be made on it, and the average during the last four years dealt with in this statement, 1897-1900, actually decreased. See Table 3, col. 23, p. 13.

It is advisable in reference to this point to make a note of the sums held by the banks of the United Kingdom, and to compare with these figures the amount of the reserve of the Bank of England.

My own estimate in *Notes on Banking*, made in 1872, was that the amount of the capitals, deposits, and circulation of all the banks in the United Kingdom was at that date—

	Average Reserve of the Bank of England.	Proportion per cent. of Reserve of Bank to Liabilities of all Banks to the Public.
1872. £584,000,000 . . .	£12,100,000 . . .	2.06
The deposits, current accounts, and note circulation of all the banks publishing accounts in the United Kingdom were—*		
1894. £721,400,000	£25,800,000 . . .	3.58
1895. 704,600,000	29,900,000 . . .	3.75
1896. 797,700,000	34,600,000 . . .	4.33
1897. 816,400,000	25,100,000 . . .	3.07
1898. 838,300,000	22,900,000 . . .	2.73
1899. 869,300,000	21,200,000 . . .	2.44
1900. 889,600,000	21,400,000 . . .	2.41
1901. 888,100,000	24,046,000 . . .	2.71

Meanwhile as the amount of loanable capital outside the Bank of England has till recently increased in a larger proportion than the amount of loanable capital which the Bank holds, it has become more difficult for the Bank to maintain that influence over the market rate which it is needful for it to exert. The more close is the harmony existing between the market rate and the Bank rate, the more swiftly is the Bank able to influence the market rate, and thus to regulate the amount of its reserve. The more carefully the business of banking is conducted throughout the country the less will the danger be of those demands which arise through the results of inflation of business and overtrading. The influence which bankers generally can exert over the business of the country is very great, and considering the extreme delicacy of our money market, the more needful it is that that influence should be continually exerted on the side of prudence.

This statement will give our readers a general view of the fluctuations in the rate of interest charged by the Bank of England during the period from 1844 to 1900. We propose in the following chapters to carry the investigation somewhat further, and to examine also in some detail into the rates

* See *Bankers' Magazine*, April, 1902. Waterlow and Sons, Limited, London.

charged by the Bank of France, the Bank of Germany, the Bank of Holland, and the Bank of Belgium. Tables have been added, marked Table 41, p. 209, Table 45, p. 216, which show at one view the fluctuations in the rates of discount charged by these banks for the years under consideration; Table 37, p. 196, with the number of variations in the rates of discount; Table 38, p. 197, which shows the lowest and highest rates charged and the extent of the fluctuations; Table 39, p. 198, with a summary of the number and extent of annual fluctuations in the rates charged; and other tables illustrative of these details. These show generally what the course of these fluctuations has been.

CHAPTER XI

SOME OF THE CAUSES WHICH INFLUENCE THE RATE OF INTEREST CHARGED BY THE BANK OF ENGLAND

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Average Rates for groups of years, 1845-1854; 1855-1900	106-107	Reference to monthly fluctuations in the Rate at Banks of France, Germany, Holland, and Belgium	110
Influence of the different seasons of the year on the Fluctuations of the Rate and on business generally	107	Connection between demands made on account of Irish and Scotch Note Circulation and the Liabilities and Reserve of the Bank	110
Business activity at certain seasons of the year	107	Mr. Weguelin (1856) on the influence of the Scotch and Irish Circulation on the Bank of England Reserve	110
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A SPECIAL set of tables has been prepared to illustrate the relation between the reserve of the Bank of England and the current rate of interest. These tables, No. 11, pp. 82, 83, and No. 12, p. 97, give the average minimum rate of discount for each month in the years 1845-1900, and the corresponding averages of the liabilities and the reserve in groups generally of ten years each. The average yearly rate also requires attention. It is given in col. 46 of Table 3, p. 15.

The average rate of interest charged by the Bank, after having increased from 1854 to 1866, has diminished, and, except in 1872, 1873, 1882, and 1890, the tendency has been towards lower rates for money almost uniformly for the last thirty-six years.

If we divide the period under consideration into six groups, —five of ten years each, 1845-54, 1855-64, 1865-74, 1875-84;

1855-94, and one of six years, 1895-1900—we shall find that the average rates in these groups were as follows:—

	£ s. d.
1845-54	. . . 3 8 5
1855-64	. . . 4 12 9
1865-74	. . . 3 6 1
1875-84	. . . 3 3 11
1885-94	. . . 3 3 2
1895-1900	. . . 3 0 4

The average for the whole period 1845-1900 is £3 12s.

On referring to Table 12, p. 97, from which these figures are derived, it will be observed that there is a periodic fluctuation from one season of the year to another.

In all the periods into which this statement is divided, the months of winter are generally the time of the highest charges. In the years 1855-64 the rate in the month of May, and in the years 1865-74 the rates in May and June, were very high. But these were exceptions. As a rule the autumn and early winter months are the times of greatest business activity, which sometimes affects the rate as late as the months of January and February. The demands which the home harvest brings are great; the demands which foreign supplies of all kinds entail are more pressing still. The large amounts of produce then coming forward affect the money market; and a deficient harvest (should there be a short supply) usually manifests itself about the third week in October. The shipments of corn also from America generally commence early in September, and intensify up to the middle of November. These causes, and others of a kindred nature which there is no need to specify, account for the autumnal demand.* They do not, however, exist in the spring. In the month of May, a corresponding, though slighter, increase of pressure may be observed to that taking place in October, November, and December. The opening up of those sources of importation which have been locked up by the severity of the winter probably accounts for a considerable part of the increased demand for money indicated by a rise in its value. Some effect also must be assigned to the periodic increase in the Scotch note circulation in the months of May and November. Any increase in that circulation beyond the limits fixed by the

* See Chapter XIV., p. 138, "The Autumnal Drain."

legislation of 1844 and 1845 causes an immediate demand on the reserve of the Bank of England for gold. The increase in the Scotch circulation beyond the limit of 1845 did not become very distinctly marked till 1856. It has become much more considerable of late. It will be observed that the Bank rate in May was for the years 1845-54 below the average of the year. For the years 1865-74 the rate in May was higher than in any other month of the years included, except November. The particulars of the Scotch circulation in May, November, and December, for the years 1897-1900, are as follows:—

AUTHORIS'D LIMIT OF SCOTCH BANK NOTE CIRCULATION (£2,749,271) AND GOLD AND SILVER COIN HELD.

	Actual Circulation.	Gold and Silver Coin Held.
	Average of 1897, £7,339,000.	Average of 1897, £5,899,000.
1897.		
May	7,566,000	5,892,000
June	7,875,000	6,340,000
October	7,445,000	5,973,000
November	8,026,000	6,486,000
December	7,674,000	6,211,000
	Average of 1898, £7,502,000.	Average of 1898, £6,012,000.
1898.		
May	7,584,000	6,041,000
June	7,943,000	6,367,000
October	7,688,000	6,203,000
November	8,260,000	6,742,000
December	8,025,000	6,566,000
	Average of 1899, £7,859,000.	Average of 1899, £6,431,000.
1899.		
May	8,027,065	6,360,000
June	8,377,000	6,873,000
October	7,972,000	6,694,000
November	8,544,000	7,162,000
December	8,268,000	6,858,000
	Average of 1900, £7,959,000.	Average of 1900, £6,461,000.
1900.		
May	7,963,065	6,896,000
June	8,463,000	6,919,000
October	8,118,000	6,666,000
November	8,715,060	7,194,000
December	8,566,000	7,027,000

For the year 1900 the gold held against the extra note circulation in Scotland in the months mentioned above exceeded the average holding by £700,000. The difference between the highest and lowest holdings of specie is far larger than this, and forms a perfectly needless demand on the central specie.

reserve of the country. This subject is examined into further in Chapter XII., p. 112, which deals with the Scotch and Irish note circulations.

It may be desirable to mention here the causes which lead to these periodic, though temporary, requirements for notes in Scotland.

"The main causes of the increased note issues in May and November are undoubtedly these:—

- "1st. The payments of rents and interests on mortgages, which, in Scotland, are almost uniformly made at the half-yearly terms of Whitsuntide (15th May) and Martinmas (11th November).
- "2nd. The settlement of all important transactions in heritable property, which are also fixed for the same terms.
- "3rd. The payment of household servants' wages, and in many cases salaries, at the same period.

"These payments are to a large extent made through the medium of bank notes, and thus these notes get into hands where they remain for a time, many of the parties who receive the notes having no bank account.

"It is further to be noted:—

- "1st. That on the 4th of the month an unusually large amount of bills falls due, and if the 4th happens on a Saturday (the day when the returns are made up) we generally look for a heavier return on that account.
- "2nd. The November returns are usually heavier than those in May, because of the requirements of the harvest, travellers, etc.
- "3rd. In the country districts the term-day is in many places regulated by the old style, and thus the payment of farm rents runs on into June and December."

This statement is taken from a description of the circumstances written to me in 1872 by a well-known Scotch banker, the late Dr. Charles Gardner, at that time General Manager

110 CAUSES WHICH INFLUENCE RATE OF INTEREST [CH. XI]

of the Union Bank of Scotland. Mr. George Anderson, the Treasurer of the Bank of Scotland, assures me that the circumstances described by Dr. Gairdner are equally effective at the present day.

It becomes desirable to refer at this point to the monthly fluctuations in the rate of discount charged by the Bank of England, and to compare them with the corresponding fluctuations in France, Germany, Holland and Belgium. The rates of the Banks of England, France, Germany, Holland and Belgium have therefore been tabulated on a similar basis for the years 1845-1900, and divided into periods generally speaking of ten years, the six years 1895-1900 being formed into a separate table. While the tables show some pressure on the Bank of England in May, and in a much higher degree in November, the other banks do not appear to experience the same influence as distinctly. The inference is that the Scotch demand in May and November may be of sufficient importance to affect the rate of the Bank of England. If we refer to Table 11, at pp. 82, 83, which contains a summary of the monthly averages of the liabilities and reserve of the Bank of England for the years 1845-1900, we shall find that the liabilities of the Bank on average have been low in the months of May and November; that the reserve is comparatively weak in the months of April, May, October and November, and the proportion of the reserve to the liabilities low likewise. Something may perhaps be due to payments of dividends in the months of April and October. It is probable that there is some connection between the demands made on the reserve on account of the Irish and Scotch note circulation and these circumstances. The opinion that these demands on the reserve are not specially connected with the ordinary circumstances of the trade of the country is supported by a reference to the returns of the Clearing House when tabulated so as to show the amount of business passing in each month of the year. The particulars from 1868 to 1900 are given in Table 18, in Chapter XIII., at page 133. Those figures do not show any exceptional demand in the month of November and not a very severe demand in May, and as the effect of a severe demand in May is not traceable in the ordinary course of business of this country, or in the

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rate charged by the Banks of France, Germany, Holland and Belgium, and the severity of the demand in November in those countries is not so great as in England, the inference is that the fluctuations shown to exist at the Bank of England at those periods are influenced in some appreciable degree by the requirements of the Acts of 1844-5 in connection with the Scotch and Irish note circulation.

This was noticed so far back as 1856 by Mr. T. M. Weguelin, who was at that time governor of the Bank. Mr. Weguelin observed in a letter to the Chancellor of the Exchequer (Sir G. C. Lewis) on the effect of this demand :—

"Now with regard to the oscillation of the internal circulation of the country, I may notice that there is periodically a demand for currency from the Scotch and Irish banks, which, whilst it produces a most sensible effect upon the Bank of England reserve, is uncontrollable, by any action of the Bank. At certain periods of the year, especially of the harvest, the demand for currency commonly greatly exceeds the authorised issue; and as the excess must be issued on gold deposited in certain specified places, that gold is withdrawn from the Bank reserve, to be again restored to it when the reflux of the currency of the Scotch and Irish banks takes place, which is usually in the months of December to March. The Scotch banks very generally exceed their authorised aggregate issue; but with the Irish banks, although the aggregate issue is not usually exceeded, yet it often happens that some are in excess, whilst others are under the authorised amount. But as each bank has to provide for its own excess, the demand on the London bullion reserve is as great as if the whole Irish circulation had gone beyond its limit."

The fluctuations in the note circulation in Ireland have rarely been as large as those in the note circulation in Scotland, the periodical fluctuations in which have greatly increased of recent years, and continue to increase.

The subject is an important one, and, as mentioned above, requires to be examined into further, owing to the manner in which specie is required to be held against the excess note circulations of Scotland and Ireland by the Bank Acts of 1844-5.

This will, therefore, be considered in the next chapter.

CHAPTER XII

THE SCOTCH AND IRISH NOTE CIRCULATION

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THE course of the Irish and Scotch note circulations, and the connection between the fluctuations in them and the reserve of the Bank of England, now require to be considered. By the Bank Acts of 1845 which refer to the Scotch and Irish circulations, specie is compelled to be held against any excess of the issue over the limits authorised by those Acts. The note circulation in both countries, especially in Scotland, has greatly increased since 1845, and I have tabulated the figures, both of the note circulation and of the specie held against it, in the same groups as for the other statements. These will be found in Tables 15 and 16, on pages 118-120 and 121-123. In these tables the statements follow the order of the months in each year as they stand in the calendar. As the matter, however, requires further consideration, owing to the influence which the requirements of the note circulations for specie have on the reserve,

of the Bank, I have arranged the figures again in Table 17, pp. 124-131. In this Table the months are not placed in the order of the calendar, but in that of the month with the smallest circulation first, thus proceeding to the highest. The averages of the Bank of England rate of discount are added, arranged in the same manner. The columns of proportional figures will enable the reader to follow the course of events without difficulty. As a rule it will be observed that the specie held against the note circulation, both in Scotland and in Ireland, corresponds very closely in its movements with the note circulation, fluctuating as the note circulation fluctuates. This is what might be expected. The specie held by the Scotch and Irish banks has reference far more to the note circulation than to their customers' requirements for cash. If the reader will pass his eye along the table, keeping the columns of proportional figures in mind, he will find that as a rule the months in which the note circulation in Scotland and Ireland, the specie held, and the bank rate are highest, in the majority of instances correspond. This is not invariably the case, but the recurrence is sufficiently frequent to suggest a connection between them. The principle by which the holding of the specie is regulated is described in a paper by the late Dr. Charles Gairdner, whom I referred to in the last chapter with reference to the movements in the Scotch note circulation. I quote from him again here, as I know of no other statement which explains the point to which I desire to draw attention, in fewer and clearer words, and have only to express my regret that Dr. Gairdner has left behind him so little in writing on these subjects.

Dr. Gairdner headed his remarks on the subject as

The Influence Exercised by the Bank Acts of 1844 and 1845.

"These Acts proceed on the preamble that 'it is expedient to regulate the issue of bills or notes payable on demand,' and the mode of regulation adopted is by prohibiting the institution of any new bank of issue, and imposing on those in existence certain stringent conditions." It is not my intention on this occasion to enter on the general question of bank notes, a question which would require at least one evening to itself; and I therefore only ask your attention to the manner in which

the regulations of the Bank Act exercise an influence on the reserves of coin.

"The general principle of the Acts of both years is that gold must be held by the banks of issue, individually, for whatever sum their actual issues exceed their authorised issues. Under the English Act this general principle is qualified by the fact that the country banks of issue in England are prohibited from exceeding, under any circumstances, the amount of their authorised issues, a prohibition which has the effect of compelling them to use the notes of the Bank of England to the extent whereby the demand upon them for notes exceeds their authorised issues. Any expansion of notes in England, then, beyond the amount authorised in the Act, is necessarily an expansion of the note circulation of the Bank of England. In Scotland and in Ireland, on the other hand, the banks may increase their circulation to any extent in accordance with the public demand, provided that they have gold at their principal place of issue to an amount not less than the amount of such increase, ascertained as I shall presently explain.

"This being the general principle of the Bank Acts, there has to be noted a very important difference in its application in England as compared with Scotland and Ireland. At the Bank of England, where alone in England any expansion of note issues can take place, the official arrangements of the bank are divided into two distinct departments—a note-issuing department and a banking department. From the note department no notes can legally be issued, even for an hour, in excess of the authorised amount, *plus* the coin in that department. It follows from this that a sudden demand for notes made on the banking department sufficient to exhaust their reserve will create a deadlock.

"In Scotland and in Ireland, on the other hand, no such deadlock need take place, because any demand for notes, to whatever extent it may go, may be legally complied with, provided that *on the average of four weeks*, ascertained at the close of business on each succeeding Saturday, the issuing banks respectively hold, at their principal place of issue, an amount of gold corresponding with the excess of issue beyond the authorised amount. Contravention of this provision would

involve a certain pecuniary penalty on the offending bank; but contravention is improbable and unnecessary, because of the time allowed for strengthening the stock of gold through the principle of average over four successive weeks.*

The only source, however, from which the gold required can be obtained is from the reserve of the Bank of England. This subject has been referred to in Chapter IX. p. 81. The specie held in Scotland and Ireland does not form a special security against the note circulation. It is an asset held against the general liabilities of the issuing bank.

The fixed issue of the Scotch Banks was in 1845	£3,087,209
It was diminished by the failure of the Western Bank	
of Scotland, 28th August, 1858	£337,938
,, City of Glasgow Bank, 2nd October, 1878	72,921
	<hr/>
	410,859
The fixed issue from 1878 to 1900 was	<hr/> £2,676,350

Hence as the notes which had been issued by the Western Bank of Scotland and the City of Glasgow Bank were taken up by the other banks, the amount of specie (over £400,000), which represents the issue allowed by the Acts of 1844-5 to the Western Bank of Scotland and the City of Glasgow Bank, is now permanently lodged in Scotland, with some £3,000,000 more held against the excess of the aggregate circulation over the limit allowed.

The fixed issue of the banks in Ireland remains the same in 1900 as it was in 1845, £6,354,494. Ireland is the only part of the United Kingdom in which the note issue has remained without alteration since the Acts of 1844-5 were passed.

The following statement shows the difference between the highest and the lowest months from 1845-1900. It shows how much larger in consequence the demand for specie both in Scotland and Ireland is now than it was in 1845:-

* *The Constitution and Course of the Money Market*, by CHARLES GAIRDNER, General Manager of the Union Bank of Scotland, Limited. Read before the Economic Section of the Glasgow Philosophical Society, 20th February, 1888 (J. Maclehose and Sons, Glasgow, 1888), pp. 15-17.

SCOTCH NOTE CIRCULATION AND SPECIE HELD.

	NOTE CIRCULATION.			SPECIE HELD.		
	Difference between the highest month and the lowest month.	Mean of the extreme variations during each period.	Per Cent.	Difference between the highest month and the lowest month.	Mean of the extreme variations during each period.	Per Cent.
1845-1854	559,000	8·5	.....	*198,000	9	
1855-1864	704,000	8·5	.....	895,000	6·5	
1865-1874	814,000	8·5	.....	511,000	8	
1875-1884	1,072,000	9·5	.....	819,000	10	
1885-1894	1,092,000	9	.....	945,000	10·5	
1895-1900	1,380,000	9·5	.....	1,304,000	11	
1845-1900	839,000	8·5	.....	568,000	8·5	*

IRISH NOTE CIRCULATION AND SPECIE HELD.

	NOTE CIRCULATION.			SPECIE HELD.		
	Difference between the highest month and the lowest month.	Mean of the extreme variations during each period.	Per Cent.	Difference between the highest month and the lowest month.	Mean of the extreme variations during each period.	Per Cent.
1845-1854	999,000	9	.....	1262,000	8	
1855-1864	1,005,000	8	.....	302,000	7	
1865-1874	1,294,000	9·5	.....	518,000	10	
1875-1884	1,340,000	9·5	.....	512,000	8·5	
1885-1894	974,000	7·5	.....	401,000	6·5	
1895-1900	1,057,000	8	.....	422,000	7	
1845-1900	1,103,000	8·5	.....	352,000	7	

* 1846-54—Nine years in the case of specie held.

† 1846-54—Nine years in the case of specie held.

See Tables 15, 16, 17, pp. 118-131.

It will be convenient here to quote the clauses of the Bank Acts of 1845 which regulate the holding of specie against the excess issue in Ireland and Scotland.

Anno Octavo et Nono Victoriae Regiae, Cap. xxxvii.

An Act to regulate the Issue of Bank Notes in *Ireland*, and to regulate the Repayment of certain Sums advanced by the Governor and Company of the Bank of *Ireland* for the Public Service. [21st July, 1845.]

What shall be taken in the Account of Coin held by any Banker.

Clause XX.—And be it enacted, That in taking account of the Coin held by any Banker in *Ireland* with respect to which Bank Notes to a further Extent than the Sum certified as aforesaid by the Commissioners of Stamps and Taxes may, under the Provisions of this Act, be made and issued, there shall be included only the Gold and Silver Coin held by such Banker at the several head Offices or principal Places of Issue in *Ireland* of such Banks, such head Offices or principal Places of Issue not exceeding

Four in Number, of which not more than Two shall be situated in the same Province; and every Banker shall give Notice in Writing to the said Commissioners, on or before the Sixth Day of December next, of such head Offices or Principal Places of Issue at which the Account of Gold and Silver Coin held by him is to be taken as aforesaid; and no Amount of Silver Coin exceeding One Fourth Part of the Gold Coin held by such Banker as aforesaid shall be taken into account, nor shall any Banker be authorised to make and issue Bank Notes in Ireland on any Amount of Silver Coin held by such Banker exceeding the Proportion of One Fourth Part of the Gold Coin held by such Banker as aforesaid.—8° et 9° Victoriae, Cap. 37, § xx.

Silver
Coin not
to exceed
the Pro-
portion of
One
Quarter of
Gold.

Anno Octavo et Nono Victoriae Regine, Cap. xxxviii.

An Act to regulate the Issue of Bank Notes in Scotland. [21st July, 1845.]

Clause X.—And be it enacted, That for the Purpose of ascertaining the monthly average Amount of Bank Notes of each Banker in Circulation, the aggregate of the Amount of Bank Notes of each such Banker in Circulation at the Close of the Business on Saturday of each Week during the first complete Period of Four Weeks next after the Sixth Day of December One thousand eight hundred and forty-five shall be divided by the Number of Weeks, and the Average so ascertained shall be deemed to be the Average of Bank Notes of each such Bank in Circulation during such Period of Four Weeks, and so in each successive Period of Four Weeks; and the monthly average Amount of Gold and Silver Coin respectively held as aforesaid by such Banker shall be ascertained in like Manner from the Amount of Gold and Silver Coin held by such Banker at the head Office or principal Place of Issue in Scotland of such Banker at the Close of Business on Saturday in each Week during the same Period; and the monthly average Amount of Bank Notes of each such Banker in Circulation during any such Period of Four Weeks is not to exceed a Sum made up by adding the Amount certified by the Commissioners of Stamps and Taxes as aforesaid and the monthly average Amount of Gold and Silver Coin held by such Banker as aforesaid during the same Period.

Mode of
ascertaining
the average
amount of
Bank
Notes of
each
Banker in
circula-
tion, and
Gold Coin,
during the
first Four
Weeks
after 31st
December
1845.

Clause XI.—And be it enacted, That in taking account of the Coin held by any such Banker as aforesaid, with respect to which Bank Notes to a further Extent than the Sum certified as aforesaid by the Commissioners of Stamps and Taxes may, under the Provisions of this Act, be made and issued, no Amount of Silver Coin exceeding One Fourth Part of the Gold Coin held by such Banker as aforesaid shall be taken into account, nor shall any Banker be authorised to make and issue Bank Notes in Scotland on any amount of Silver Coin held by such Banker exceeding the Proportion of One Fourth Part of the Gold Coin held by such Banker as aforesaid.—8° et 9° Victoriae, Cap. 38, §§ x. xi.

In taking
the Ac-
count of
Coin
held by
Bankers,
Silver Coin
not to ex-
ceed the
Proportion
of One
Fourth of
Gold.

TABLE 15.

Monthly Averages of Note Circulation and of Gold and Silver Coin held in Scotland 1845-1900, in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900. (The returns of the species held commence in 1846.)

Month.	NOTE CIRCULATION. 1846-54.		SPECIE HELD. 1846-54.		Proportion of Specie to Circulation, 32%.	Average of Nine Years, 32% = 100.
	Average for the Ten Years, £3,426,000.	Average of Ten Years = 100.	Average for the Nine Years, £1,099,000.	Average of Nine Years = 100.		
January .	3,426,000	100	1,121,000	102	33	103
February .	3,252,000	95	1,122,000	102	34	106
March .	3,163,000	92	1,113,000	101	35	109
April .	3,187,000	93	1,063,000	97	33	103
May .	3,396,000	99	1,100,000	100	32	100
June .	3,633,000	106	1,118,000	102	31	97
July .	2,401,000	99	1,070,000	97	31	97
August .	3,359,000	98	1,031,000	94	31	97
September .	3,364,000	98	1,014,000	92	30	94
October .	3,497,000	102	1,055,000	96	30	94
November .	3,710,000	108	1,174,000	107	31	97
December .	3,722,000	109	1,212,000	110	32	100

Difference : Highest and Lowest Month, £559,000.
Mean of extreme Variations for 1845-54, 8·5/-.

Difference: Highest and Lowest Month, £198,000.
Mean of extreme Variations for 1846-54, 8°.

Month.	NOTE CIRCULATION, 1855-64.		SPECIE HELD, 1855-64.		Proportion of Specie to Circulation, 54%.	Average of Ten Years 54%, = 100.
	Average for the Ten Years, £4,137,000.	Average of Ten Years = 100.	Average for the Ten Years, £2,433,000.	Average of Ten Years = 100.		
January .	£ 4,191,000	101	£ 2,282,000	102	54	100
February .	3,985,000	96	2,236,000	100	56	104
March .	3,851,000	93	2,180,000	98	57	103
April .	3,814,000	92	2,197,000	99	58	107
May .	4,048,000	98	2,242,000	100	55	102
June .	4,393,000	106	2,299,000	103	52	96
July .	4,084,000	99	2,195,000	98	53	100
August .	4,011,000	97	2,144,000	96	53	98
September .	4,042,000	98	2,099,000	94	52	96
October .	4,242,000	102	2,181,000	98	51	94
November .	4,470,000	108	2,342,000	105	52	96
December .	4,518,000	109	2,394,000	107	53	98

Difference: Highest and Lowest Month, £704,000
 Mean of extreme Variations for 1855-64 8·5%

Difference : Highest and Lowest Month, £295,000
 Mean of extreme Variations for 1855-64, 6·5%.

Month.	NOTE CIRCULATION, 1865-74.		SPECIE HELD, 1865-74.		Proportion of Specie to Circulation, 62%.	Average of Ten Years 62% = 100.
	Average for the Ten Years, £4,963,000.	Average of Ten Years = 100.	Average for the Ten Years, £3,075,000.	Average of Ten Years = 100.		
January .	4,883,000	98	3,044,000	99	62	100
February .	4,687,000	94	2,992,000	97	64	108
March .	4,593,000	92	2,923,000	95	64	108
April .	4,687,000	94	2,917,000	96	62	100
May .	5,098,000	103	3,108,000	101	61	98
June .	5,243,000	106	3,210,000	104	61	98
July .	4,940,000	99	3,044,000	98	62	100
August .	4,845,000	98	2,950,000	96	61	98
September .	4,842,000	98	2,940,000	96	61	98
October .	5,043,000	102	3,047,000	99	61	98
November .	5,284,000	107	3,300,000	107	62	100
December .	5,407,000	109	3,428,000	111	63	102

Difference : Highest and Lowest Month, £814,000.
Mean of extreme Variations for 1864-24, 8·5%.

CH. XII] MONTHLY AVERAGES, NOTES, SPECIE, SCOTLAND 119

TABLE 15 (*continued*).

Monthly Averages of Note Circulation and of Gold and Silver Coin held in Scotland 1845-1900, in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	NOTE CIRCULATION. 1875-84.		SPECIE HELD. 1875-84.		Proportion of Specie to Circula- tion, 73% = 100.	Average of Ten Years, 73% = 100.
	Average for the Ten Years, £5,866,000.	Average of Ten Years = 100.	Average for the Ten Years, £4,150,000.	Average of Ten Years = 100.		
January .	£ 5,769,000	99	£ 4,191,000	101	73	101
February .	5,456,000	94	4,008,000	97	73	101
March .	5,342,000	92	3,912,000	94	73	100
April .	5,371,000	92	3,852,000	93	72	100
May .	5,746,000	99	3,998,000	96	70	97
June .	6,414,000	111	4,529,000	109	71	100
July .	5,766,000	99	4,127,000	99	70	97
August .	5,622,000	97	3,915,000	94	68	96
September .	5,671,000	98	3,923,000	95	70	97
October .	5,866,000	101	4,111,000	99	73	101
November .	6,411,000	110	4,671,000	113	73	101
December .	6,253,000	108	4,566,000	110	73	101

Difference: Highest and Lowest Month, £1,072,000.
Mean of extreme Variations for 1875-84, 9½%.

Difference: Highest and Lowest Month, £819,000.
Mean of extreme Variations for 1875-84, 10%.

Month.	NOTE CIRCULATION. 1885-94.		SPECIE HELD. 1885-94.		Proportion of Specie to Circula- tion, 73% = 100.	Average of Ten Years, 73% = 100.
	Average for the Ten Years, £6,115,000.	Average of Ten Years = 100.	Average for the Ten Years, £4,456,000.	Average of Ten Years = 100.		
January .	£ 6,044,000	99	£ 4,500,000	101	74	101
February .	5,706,000	93	4,200,000	94	74	101
March .	5,576,000	91	4,053,000	91	73	100
April .	5,734,000	94	3,947,000	89	69	95
May .	6,431,000	105	4,599,000	103	72	99
June .	6,433,000	105	4,776,000	107	74	101
July .	6,168,000	101	4,422,000	99	72	99
August .	6,003,000	98	4,365,000	98	73	100
September .	6,031,000	99	4,431,000	100	73	100
October .	6,074,000	99	4,459,000	100	73	100
November .	6,515,000	107	4,823,000	108	74	101
December .	6,668,000	109	4,892,000	110	73	100

Difference: Highest and Lowest Month, £1,092,000.
Mean of extreme Variations for 1885-94, 9%.

Difference: Highest and Lowest Month, £945,000.
Mean of extreme Variations for 1885-94, 10%.

Month.	NOTE CIRCULATION. 1895-1900.		SPECIE HELD. 1895-1900.		Proportion of Specie to Circula- tion, 80% = 100.	Average of Six Years, 80% = 100.
	Average for the Six Years, £7,471,000.	Average of Six Years = 100.	Average for the Six Years, £5,981,000.	Average of Six Years = 100.		
January .	£ 7,054,000	94	£ 5,755,000	96	77	96
February .	6,810,000	91	5,533,000	93	81	101
March .	5,834,000	71	5,419,000	90	79	99
April .	7,054,000	94	5,403,000	90	72	99
May .	7,004,000	102	5,981,000	100	79	100
June .	7,970,000	107	6,378,000	107	80	100
July .	7,583,000	101	6,060,000	101	80	100
August .	7,451,000	90	5,901,000	99	80	100
September .	7,513,000	101	6,033,000	101	80	100
October .	7,098,000	103	6,156,000	103	82	103
November .	8,190,000	110	6,707,000	112	82	103
December .	7,890,000	106	6,438,000	108	82	103

Difference: Highest and Lowest Month, £1,380,000.
Mean of extreme Variations for 1895-1900, 9½%.

Difference: Highest and Lowest Month, £1,304,000.
Mean of extreme Variations for 1895-1900, 11%.

TABLE 15 (*continued*).

Monthly Averages of Note Circulation and of Gold and Silver Coin held in Scotland 1845-1900, in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900. (The returns of the specie held commence in 1846.)

Month.	NOTE CIRCULATION. 1845-1900.		SPECIE HELD. 1846-1900.		Proportion of Specie to Circula- tion, 65%/ 65% = 100.	Average of Fifty-five Years, 65%/ 65% = 100.
	Average for the Fifty- six Years, £5,164,000.	Average of Fifty-six Years = 100.	Average for the Fifty- ve Years, £3,362,000.	Average of Fifty-five Years = 100.		
January .	5,087,000	99	3,360,000	100	66	102
February .	4,852,000	94	3,230,000	96	67	103
March .	4,754,000	92	3,149,000	94	66	102
April .	4,826,000	93	3,111,000	93	65	100
May .	5,223,000	101	3,368,000	100	65	100
June .	5,520,000	107	3,572,000	106	65	100
July .	5,173,000	100	3,344,000	99	65	100
August .	5,059,000	98	3,244,000	96	64	98
September .	5,072,000	98	3,259,000	97	64	98
October .	5,222,000	101	3,353,000	100	64	98
November .	5,593,000	109	3,676,000	100	66	102
December .	5,590,000	109	3,679,000	110	66	102

Difference: Highest and Lowest Month, £839,000.
Mean of extreme Variations for 1845-1900, 8·5%.

Difference: Highest and Lowest Month, £568,000.
Mean of extreme Variations for 1846-1900, 8·5%.

Fixed Issue, Banks in Scotland, 1845-54	£	3,087,209
Fixed Issue, Banks in Scotland, 1855	£	3,087,209
Deduct Western Bank of Scotland, 28th August, 1858 .	£	337,938
		2,749,271
Fixed Issue, Banks in Scotland, 1858-78	£	2,749,271
Deduct City of Glasgow Bank, 2nd October, 1878 .	£	72,921
		2,676,350
Fixed Issue, Banks in Scotland, 1878-1900	£	2,676,350

CH. XIII] MONTHLY AVERAGES, NOTES, SPECIE, IRELAND ***

TABLE 16.

Monthly Averages of Note Circulation and of Gold and Silver Coin held in Ireland, 1845-1900, in Groups of Ten Years, 1845-54, 1855-64, 1856-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900. (The returns of the specie held commence in 1846.)

Month.	NOTE CIRCULATION. 1845-54.		SPECIE HELD. 1845-54.		Proportion of Specie to Circula- tion, 30%.	Average of Nine Years, 30% = 100.
	Average for the Ten Years, £5,483,000.	Average of Ten Years = 100.	Average for the Nine Years, £1,659,000.	Average of Nine Years = 100.		
January	5,803,000	106	1,756,000	106	33	110
February	5,789,000	106	1,773,000	107	30	100
March	5,665,000	103	1,766,000	106	31	103
April	5,630,000	102	1,793,000	102	30	100
May	5,520,000	101	1,648,000	99	30	100
June	5,235,000	95	1,704,000	102	32	107
July	5,041,000	92	1,591,000	96	31	103
August	4,931,000	90	1,563,000	94	31	108
September	4,946,000	90	1,511,000	91	30	100
October	5,423,000	99	1,561,000	94	28	98
November	5,930,000	108	1,649,000	99	27	90
December	5,885,000	107	1,692,000	102	28	98

Difference: Highest and Lowest Month, £999,000.
Mean of extreme Variations for 1845-54, 9%.

Difference: Highest and Lowest Month, £662,000.
Mean of extreme Variations for 1846-54, 8%.

1845, Fixed Issue Banks in Ireland, £6,354,494.

Month.	NOTE CIRCULATION. 1855-64.		SPECIE HELD. 1855-64.		Proportion of Specie to Circula- tion, 36%.	Average of Ten Years, 36% = 100.
	Average for the Ten Years, £6,287,000.	Average of Ten Years = 100.	Average for the Ten Years, £2,245,000.	Average of Ten Years = 100.		
January	6,518,000	104	2,374,000	104	36	100
February	6,547,000	104	2,359,000	105	36	100
March	6,430,000	102	2,304,000	103	36	100
April	6,369,000	101	2,236,000	99	35	97
May	6,388,000	102	2,203,000	98	35	97
June	6,093,000	97	2,189,000	97	36	100
July	5,820,000	92	2,138,000	95	37	103
August	5,690,000	90	2,109,000	94	36	100
September	5,836,000	93	2,095,000	93	36	94
October	6,495,000	103	2,215,000	99	35	97
November	6,695,000	106	2,324,000	104	37	103
December	6,569,000	104	2,397,000	107	37	108

Difference: Highest and Lowest Month, £1,005,000.
Mean of extreme Variations from 1855-64, 8%.

Difference: Highest and Lowest Month, £302,000.
Mean of extreme Variations for 1855-64, 7%.

Month.	NOTE CIRCULATION. 1865-74.		SPECIE HELD. 1865-74.		Proportion of Specie to Circula- tion = 39%.	Average of Ten Years, 39% = 100.
	Average for the Ten Years, £6,616,638.	Average of Ten Years = 100.	Average for the Ten Years, £2,548,000.	Average of Ten Years = 100.		
January	6,756,000	102	2,706,000	105	40	103
February	6,699,000	101	2,634,000	102	39	100
March	6,598,000	100	2,570,000	100	39	100
April	6,085,000	101	2,531,000	98	38	97
May	6,683,000	101	2,632,000	98	38	97
June	6,356,000	96	2,476,000	95	39	100
July	6,149,000	93	2,415,000	94	39	100
August	6,057,000	92	2,393,000	93	39	100
September	6,113,000	92	2,391,000	93	39	100
October	6,773,000	102	2,583,000	100	38	97
November	7,361,000	111	2,841,000	100	39	100
December	7,158,000	108	2,909,000	113	40	103

Difference: Highest and Lowest Month, £1,294,000.
Mean of extreme Variations for 1865-74, 9.5%.

Difference: Highest and Lowest Month, £518,000.
Mean of extreme Variations for 1865-74, 8%.

TABLE 16 (continued).

Monthly Averages of Note Circulation and of Gold and Silver Coin held in Ireland, 1845-1900, in Groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	NOTE CIRCULATION. 1875-84.		SPECIE HELD. 1875-84.		Proportion of Specie to Circula- tion = 44 %.	Average of Ten Years, 44 % = 100.
	Average for the Ten Years, £6,864,000.	Average of Ten Years = 100.	Average for the Ten Years, £2,994,000.	Average of Ten Years = 100.		
January .	£ 7,053,000	103	£ 3,148,000	105	45	102
February .	6,914,000	101	3,046,000	102	44	100
March .	6,753,000	98	2,984,000	100	44	100
April .	6,847,000	100	2,939,000	98	43	98
May .	6,948,000	101	2,942,000	98	42	95
June .	6,725,000	98	2,880,000	96	43	98
July .	6,363,000	93	2,774,000	93	44	100
August .	6,252,000	91	2,758,000	92	44	100
September .	6,552,000	95	2,802,000	94	43	98
October .	7,305,000	106	3,119,000	104	43	98
November .	7,592,000	110	3,270,000	109	43	98
December .	7,349,000	107	3,265,000	109	45	102

Difference: Highest and Lowest Month, £1,340,000.
Mean of extreme Variations for 1875-84, 9·5%.

Difference: Highest and Lowest Month, £512,000.
Mean of extreme Variations for 1875-84, 8·5%.

Month.	NOTE CIRCULATION. 1885-94.		SPECIE HELD. 1885-94.		Proportion of Specie to Circula- tion = 49 %.	Average of Ten Years, 49 % = 100.
	Average for the Ten Years, £6,258,000.	Average of Ten Years = 100.	Average for the Ten Years, £3,089,000.	Average of Ten Years = 100.		
January .	£ 6,454,000	103	£ 3,156,000	102	49	100
February .	6,276,000	100	3,059,000	99	49	100
March .	6,147,000	98	3,043,000	98	49	100
April .	6,317,000	101	3,031,000	98	48	98
May .	6,369,000	102	3,041,000	98	48	98
June .	6,025,000	96	2,974,000	96	49	100
July .	5,892,000	94	2,927,000	95	50	102
August .	5,865,000	94	2,905,000	96	51	104
September .	5,877,000	94	3,041,000	98	52	106
October .	6,342,000	101	3,186,000	103	50	102
November .	6,839,000	109	3,328,000	108	49	100
December .	6,691,000	107	3,320,000	108	50	102

Difference: Highest and Lowest Month, £974,000.
Mean of extreme Variations for 1885-94, 7·5%.

Difference: Highest and Lowest Month, £401,000.
Mean of extreme Variations for 1885-94, 6·5%.

Month.	NOTE CIRCULATION. 1895-1900.		SPECIE HELD. 1895-1900.		Proportion of Specie to Circula- tion, 49 %.	Average of Six Years, 49 % = 100.
	Average for the Six Years, £6,383,000.	Average of Six Years = 100.	Average for the Six Years, £3,147,000.	Average of Six Years = 100.		
January .	£ 6,243,000	98	£ 3,129,000	99	50	102
February .	5,194,000	97	3,115,000	99	50	102
March .	6,190,000	97	3,100,000	99	50	102
April .	6,442,000	101	3,062,000	97	48	98
May .	6,576,000	103	3,135,000	100	48	98
June .	6,208,000	97	3,087,000	98	50	102
July .	5,984,000	94	2,996,000	95	50	102
August .	5,995,000	94	3,001,000	95	50	102
September .	6,181,000	97	3,148,000	100	51	104
October .	6,907,000	108	3,311,000	105	48	98
November .	7,041,000	110	3,420,000	109	49	100
December .	6,673,000	104	3,253,000	104	49	100

Difference: Highest and Lowest Month, £1,057,000.
Mean of extreme Variations for 1895-1900, 8%.

Difference: Highest and Lowest Month, £498,000.
Mean of extreme Variations for 1895-1900, 7%.

TABLE 16 (*continued*). *

Monthly Averages of Note Circulation and of Gold and Silver Coin held in Ireland, 1845-1900, in Groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900. (The returns of specie held commence in 1846.)

Month.	NOTE CIRCULATION, 1845-1900.		SPECIE HELD. 1846-1900.		Proportion of Specie to Circula- tion, 4%/ 4% = 100.	Average of Fifty-five Years, 4%/ 4% = 100.
	Average for the Fifty- six Years, £6,313,000.	Average of Fifty-six Years = 100.	Average for the Fifty- five Years, £2,599,000.	Average of Fifty-five Years = 100.		
January	6,468,000	102	2,699,000	104	42	102
February	6,416,000	102	2,648,000	102	41	100
March	6,306,000	100	2,609,000	100	41	100
April	6,377,000	101	2,565,000	99	40	98
May	6,405,000	101	2,560,000	99	40	98
June	6,066,000	97	2,528,000	97	41	100
July	5,876,000	93	2,452,000	94	42	102
August	5,798,000	92	2,442,000	94	42	102
September	5,881,000	93	2,469,000	95	42	102
October	6,508,000	103	2,635,000	101	40	98
November	6,901,000	109	2,782,000	107	40	98
December	6,721,000	107	2,794,000	108	42	102

Difference: Highest and Lowest Month, £1,103,000.
Mean of extreme Variations for 1845-1900, 8 1/2%.

Difference: Highest and Lowest Month, £352,000.
Mean of extreme Variations for 1846-1900, 7 1/2%.

Fixed Issue, Banks in Ireland, 1845-1900 £6,354,494

SCOTCH AND IRISH NOTE CIRCULATION [CH. XII]

TABLE 17.

Monthly Averages of Rate of Discount at the Bank of England, and of Note Circulation groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, figures. (The returns of the species held both in Scotland and Ireland commence

1845-

BANK OF ENGLAND.			SCOTLAND.			SPECIE HELD, 1845-54.		
RATE OF DISCOUNT, 1845-54.			NOTE CIRCULATION, 1845-54.					
Month.	Average for the Ten Years, £3 8s. 5d.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £3,426,000.	Av. of Ten Years = 100.	Month.	Average for the Nine Years, £1,099,000.	Av. of Nine Years = 100.
January .	£ s. d. 3 5 8	96	March .	£ 3,163,000	92	September .	£ 1,014,000	92
February .	3 6 0	96	April .	3,187,000	93	August .	1,031,000	94
March .	3 6 0	96	February .	3,252,000	95	October .	1,055,000	96
April .	3 7 1	98	August .	3,359,000	98	April .	1,063,000	97
May .	3 7 7	99	September .	3,364,000	98	July .	1,070,000	97
September .	3 7 8	99	May .	3,390,000	99	May .	1,100,000	100
August .	3 7 10	99	July .	3,401,000	99	March .	1,113,000	101
July .	3 8 0	99	January .	3,426,000	100	June .	1,118,000	102
June .	3 8 4	100	October .	3,497,000	102	January .	1,121,000	102
October .	3 10 10	104	June .	3,633,000	106	February .	1,122,000	102
December .	3 10 10	104	November .	3,710,000	108	November .	1,174,000	107
November .	3 15 1	110	December .	3,722,000	109	December .	1,212,000	110
Difference: Highest and Lowest Month, 9s. 5d.			Difference: Highest and Lowest Month, £559,000.			Difference: Highest and Lowest Month, £108,000.		
Mean of extreme Variations for 1845-54, 7%.			Mean of extreme Variations for 1845-54, 8 3/4%.			Mean of extreme Variations for 1845-54, 9%.		

1855-

BANK OF ENGLAND.			SCOTLAND.			SPECIE HELD, 1855-64.		
RATE OF DISCOUNT, 1855-64.			NOTE CIRCULATION, 1855-64.			SPECIE HELD, 1855-64.		
Month.	Average for the Ten Years, £4 1s. 9d.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £4,137,000.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £2,333,000.	Av. of Ten Years = 100.
August .	£ s. d. 4 3 2	90	April .	£ 3,814,000	92	September .	£ 2,099,000	94
July .	4 4 5	91	March .	3,851,000	93	August .	2,144,000	96
September .	4 4 6	91	February .	3,985,000	95	March .	2,180,000	98
June .	4 9 6	97	August .	4,011,000	97	October .	2,181,000	98
April .	4 11 2	98	September .	4,042,000	98	July .	2,195,000	98
October .	4 12 4	99	May .	4,048,000	98	April .	2,197,000	99
March .	4 12 5	100	July .	4,084,000	99	February .	2,236,000	100
January .	4 15 8	103	January .	4,191,000	101	May .	2,242,000	100
May .	4 15 8	103	October .	4,242,000	102	January .	2,282,000	102
February .	4 16 5	104	June .	4,393,000	106	June .	2,299,000	103
December .	5 3 3	111	November .	4,470,000	108	November .	2,342,000	105
November .	5 4 9	113	December .	4,518,000	109	December .	2,594,000	107
Difference: Highest and Lowest Month, £1 1s. 9d.			Difference: Highest and Lowest Month, £704,000.			Difference: Highest and Lowest Month, £290,000.		
Mean of extreme Variations for 1855-64, 11 3/4%.			Mean of extreme Variations for 1855-64, 8 3/4%.			Mean of extreme Variations for 1855-64, 6 5/8%.		

CH. XII] MONTHLY AVERAGES, BANK OF IRELAND, 1845-1900

TABLE 17 (*continued*).

tion, and of Gold and Silver Coin held, in Scotland and in Ireland, from 1845-1900, in 1895-1900, with Summary Table, 1845-1900, arranged from the smallest to the largest with the year 1846.)

1854.

IRELAND.					
NOTE CIRCULATION, 1845-54.			SPECIE HELD, 1846-54.		
Month.	Average for the Ten Years, £5,483,000.	Average of Ten Years = 100.	Month.	Average for the Nine Years, £1,659,000.	Average of Nine Years = 100.
August . . .	4,931,000	90	September . . .	1,511,000	91
September . . .	4,946,000	90	October . . .	1,561,000	94
July . . .	5,041,000	92	August . . .	1,583,000	94
June . . .	5,235,000	95	July . . .	1,591,000	96
October . . .	5,423,000	99	May . . .	1,648,000	99
May . . .	5,520,000	101	November . . .	1,649,000	99
April . . .	5,630,000	102	December . . .	1,692,000	102
March . . .	5,665,000	103	April . . .	1,703,000	102
February . . .	5,789,000	106	June . . .	1,704,000	102
January . . .	5,803,000	106	January . . .	1,756,000	106
December . . .	5,885,000	107	March . . .	1,766,000	106
November . . .	5,930,000	108	February . . .	1,773,000	107

Difference : Highest and Lowest Month, £999,000.
Mean of extreme Variations for 1845-54, 9%.

1864.

IRELAND.					
NOTE CIRCULATION, 1855-64.			SPECIE HELD, 1855-64.		
Month.	Average for the Ten Years, £6,287,000.	Average of Ten Years = 100.	Month.	Average for the Ten Years, £2,245,000.	Average of Ten Years = 100.
August . . .	5,690,000	90	September . . .	2,095,000	93
July . . .	5,820,000	92	August . . .	2,109,000	94
September . . .	5,836,000	93	July . . .	2,138,000	95
June . . .	6,093,000	97	June . . .	2,189,000	97
April . . .	6,309,000	101	May . . .	2,203,000	98
May . . .	6,388,000	102	October . . .	2,215,000	99
March . . .	6,430,000	102	April . . .	2,236,000	99
October . . .	6,495,000	103	March . . .	2,304,000	103
January . . .	6,518,000	104	November . . .	2,374,000	104
February . . .	6,547,000	104	January . . .	2,374,000	104
December . . .	6,569,000	104	February . . .	3,359,000	105
November . . .	6,695,000	106	December . . .	2,397,000	107

Difference : Highest and Lowest Month, £1,005,000.
Mean of extreme Variations for 1855-64, 8%.

TABLE 17 (continued).

Monthly Averages of Rate of Discount at the Bank of England, and of Note Circulation groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six largest figures.

1865-

BANK OF ENGLAND.				SCOTLAND.			
RATE OF DISCOUNT, 1865-74.				NOTE CIRCULATION, 1865-74.			
Month.	Average for the Ten Years, £3 16s. 1d. = 100.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £4,963,000. = 100.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £6,075,000. = 100.
September .	3 2 2	82	March .	4,593,000	92	April .	2,917,000
March .	3 10 1	92	February .	4,687,000	94	March .	2,923,000
April .	3 11 11	94	April .	4,687,000	94	September .	2,940,000
February .	3 12 9	96	September .	4,842,000	98	August .	2,950,000
July .	3 13 10	97	August .	4,845,000	98	February .	2,992,000
August .	3 13 11	97	January .	4,883,000	98	January .	3,044,000
January .	3 17 8	101	July .	4,940,000	99	July .	3,044,000
December .	3 19 1	104	October .	5,043,000	102	October .	3,047,000
June .	3 19 8	105	May .	5,098,000	103	May .	3,108,000
October .	3 19 11	105	June .	5,243,000	106	June .	3,210,000
May .	4 3 8	110	November .	5,284,000	107	November .	3,300,600
November .	4 8 8	117	December .	5,407,000	109	December .	3,428,000
Difference: Highest and Lowest Month, £1 6s. 6d.				Difference: Highest and Lowest Month, £814,000.			
Mean of extreme Variations for 1865-74, 17 5%.				Mean of extreme Variations for 1865-74, 8 5%.			

1875-

BANK OF ENGLAND.				SCOTLAND.			
RATE OF DISCOUNT, 1875-84.				NOTE CIRCULATION, 1875-84.			
Month.	Average for the Ten Years, £3 3s. 11d. = 100.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £5,866,000. = 100.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £4,150,000. = 100.
July .	2 14 6	85	March .	5,342,000	92	April .	3,852,000
June .	2 15 2	85	April .	5,371,000	92	March .	3,912,000
April .	2 15 8	87	February .	5,456,000	94	August .	3,915,000
August .	2 15 9	87	August .	5,622,000	97	September .	3,923,000
May .	2 16 3	88	September .	5,671,000	98	May .	3,993,000
September .	3 1 3	96	May .	5,746,000	99	February .	4,008,000
March .	3 1 7	96	July .	5,766,000	99	October .	4,111,000
February .	3 5 11	103	January .	5,769,000	99	July .	4,127,000
October .	3 10 10	111	October .	5,866,000	101	January .	4,191,000
December .	3 15 10	119	December .	6,253,000	108	June .	4,529,000
January .	3 17 5	121	November .	6,411,000	110	December .	4,596,000
November .	3 18 2	122	June .	6,414,000	111	November .	4,671,000
Difference: Highest and Lowest Month, £1 3s. 8d.				Difference: Highest and Lowest Month, £1,072,000.			
Mean of extreme Variations for 1875-84, 18 5%.				Mean of extreme Variations for 1875-84, 16 5%.			

TABLE 17 (*continued*)

tion, and of Gold and Silver Coin held, in Scotland and in Ireland, 1845-1900, in Years, 1895-1900, with Summary Table, 1845-1900, arranged from the smallest to the

1874.

IRELAND.			SPECIE HELD, 1865-74.		
NOTE CIRCULATION, 1865-74.		Average for the Ten Years, £6,677,000.	Month.	Average for the Ten Years, £2,582,000.	Average of Ten Years = 100.
August . . .	£ 6,067,000	92	September . . .	2,391,000	93
September . . .	6,113,000	92	August . . .	2,393,000	93
July . . .	6,149,000	93	July . . .	2,415,000	94
June . . .	6,356,000	96	June . . .	2,476,000	95
March . . .	6,508,000	100	April . . .	2,531,000	98
May . . .	6,683,000	101	May . . .	2,532,000	98
April . . .	6,685,000	101	March . . .	2,570,000	100
February . . .	6,699,000	101	October . . .	2,583,000	100
January . . .	6,756,000	102	February . . .	2,634,000	102
October . . .	6,773,000	102	January . . .	2,706,000	105
December . . .	7,158,000	103	November . . .	2,841,000	110
November . . .	7,361,000	111	December . . .	2,909,000	113

Difference : Highest and Lowest Month, £1,294,000.
Mean of extreme Variations for 1865-74, 15%

Difference : Highest and Lowest Month, £518,000.
Mean of extreme Variations for 1865-74, 10%

1884.

IRELAND.			SPECIE HELD, 1875-84.		
NOTE CIRCULATION, 1875-84.		Average for the Ten Years, £6,864,000.	Month.	Average for the Ten Years, £2,994,000.	Average of Ten Years = 100.
August . . .	£ 6,252,000	91	August . . .	2,758,000	92
July . . .	6,363,000	93	July . . .	2,774,000	93
September . . .	6,552,000	95	September . . .	2,802,000	94
June . . .	6,725,000	98	June . . .	2,880,000	96
March . . .	6,758,000	98	April . . .	2,939,000	98
April . . .	6,847,000	100	May . . .	2,942,000	98
February . . .	6,914,000	101	March . . .	2,984,000	100
May . . .	6,948,000	101	February . . .	3,046,000	102
January . . .	7,063,000	103	October . . .	3,112,000	104
October . . .	7,305,000	106	January . . .	3,148,000	105
December . . .	7,349,000	107	December . . .	3,265,000	109
November . . .	7,592,000	110	November . . .	3,270,000	109

Difference : Highest and Lowest Month, £1,340,000.
Mean of extreme Variations for 1875-84, 9·5%

Difference : Highest and Lowest Month, £512,000.
Mean of extreme Variations for 1875-84, 8·5%

SCOTCH AND IRISH NOTE CIRCULATION. [CH. XII]

TABLE 17 (continued).

Monthly Averages of Rate of Discount at the Bank of England, and of Note Circulation, groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, figures.

1885-

BANK OF ENGLAND.			SCOTLAND.			SPECIE HELD, 1885-94.		
RATE OF DISCOUNT, 1885-94.			NOTE CIRCULATION, 1885-94.			SPECIE HELD, 1885-94.		
Month.	Average for the Ten Years, £3 3s. ad.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £6,115,000.	Av. of Ten Years = 100.	Month.	Average for the Ten Years, £4,456,000.	Av. of Ten Years = 100.
July	2 9 0	78	March	5,576,000	91	April	3,947,000	89
June	2 10 10	87	February	5,706,000	93	March	4,052,000	91
April	2 13 2	84	April	5,734,000	94	February	4,200,000	94
May	2 14 2	86	August	6,003,000	98	August	4,365,000	98
August	2 16 6	89	September	6,031,000	99	July	4,422,000	99
March	2 18 6	93	January	6,044,000	99	September	4,431,000	100
September	3 4 4	102	October	6,074,000	99	October	4,459,000	100
February	3 6 1	105	July	6,168,000	101	January	4,500,000	101
October	3 10 1	111	May	6,431,000	105	May	4,599,000	103
November	3 16 9	122	June	6,433,000	105	June	4,776,000	107
December	3 17 4	122	November	6,515,000	107	November	4,823,000	108
January	4 1 1	128	December	6,668,000	109	December	4,892,000	110

Difference: Highest and Lowest Month, £1 12s. id.
Mean of extreme Variations for 1885-94, 25%.

Difference: Highest and Lowest Month, £1,092,000.
Mean of extreme Variations for 1885-94, 9%.

Difference: Highest and Lowest Month, £945,000.
Mean of extreme Variations for 1885-94, 10.5%.

1895-

BANK OF ENGLAND.			SCOTLAND.			SPECIE HELD, 1895-1900.		
RATE OF DISCOUNT, 1895-1900.			NOTE CIRCULATION, 1895-1900.			SPECIE HELD, 1895-1900.		
Month.	Average for the Six Years, £3 os. 4d.	Av. of Six Years = 100.	Month.	Average for the Six Years, £7,471,000.	Av. of Six Years = 100.	Month.	Average for the Six Years, £5,981,000.	Av. of Six Years = 100.
June	2 10 7	84	February	6,810,000	91	April	5,403,000	90
July	2 10 10	84	March	6,834,000	91	March	5,419,000	90
August	2 13 6	89	January	7,054,000	94	February	5,533,000	93
September	2 15 5	92	April	7,054,000	94	January	5,755,000	96
February	2 16 5	94	August	7,451,000	100	August	5,901,000	99
March	2 16 8	94	September	7,513,000	101	May	5,981,000	100
May	2 17 4	95	July	7,583,000	101	September	6,033,000	101
April	2 17 8	96	May	7,604,000	102	July	6,069,000	101
January	3 6 5	110	October	7,698,000	103	October	6,156,000	103
October	3 9 2	115	December	7,890,000	106	June	6,378,000	107
November	3 13 4	121	June	7,970,000	107	December	6,438,000	108
December	3 16 8	127	November	8,190,000	110	November	6,507,000	112

Difference: Highest and Lowest Month, £1 6s. id.
Mean of extreme Variations for 1895-1900, 21.5%.

Difference: Highest and Lowest Month, £1,380,000.
Mean of extreme Variations for 1895-1900, 9.5%.

Difference: Highest and Lowest Month, £7,304.
Mean of extreme Variations for 1895-1900, 11%.

CH. XII] MONTHLY AVERAGES, BANK RATE, NOTES, SPECIE 129

TABLE 17 (*continued*).

tion, and of Gold and Silver Coin held, in Scotland and in Ireland, 1845-1900, in 1895-1900, with Summary Table, 1845-1900, arranged from the smallest to the largest.

1894.

IRELAND.					
NOTE CIRCULATION, 1885-1894.			SPECIE HELD, 1885-1894.		
Month.	Average for the Ten Years, £6,258,000.	Average of Ten Years = 100.	Month.	Average for the Ten Years, £3,089,000.	Average of Ten Years = 100.
August . . .	5,865,000	94	July . . .	2,927,000	95
September . . .	5,877,000	94	August . . .	2,905,000	96
July . . .	5,892,000	94	June . . .	2,974,000	96
June . . .	6,025,000	96	April . . .	3,031,000	98
March . . .	6,147,000	98	May . . .	3,021,000	98
February . . .	6,276,000	100	September . . .	3,041,000	98
April . . .	6,317,000	101	March . . .	3,043,000	98
October . . .	6,342,000	101	February . . .	3,059,000	99
May . . .	6,309,000	102	January . . .	3,156,000	102
January . . .	6,454,000	103	October . . .	3,186,000	103
December . . .	6,691,000	107	December . . .	3,320,000	108
November . . .	6,839,000	109	November . . .	3,328,000	108

Difference: Highest and Lowest Month, £974,000.
Mean of extreme Variations for 1885-94, 7·5%.

Difference: Highest and Lowest Month, £401,000.
Mean of extreme Variations for 1885-94, 6·5%.

1900.

IRELAND.					
NOTE CIRCULATION, 1895-1900.			SPECIE HELD, 1895-1900.		
Month.	Average for the Six Years, £6,383,000.	Average of Six Years = 100.	Month	Average for the Six Years, £3,147,000.	Average of Six Years = 100.
July . . .	5,984,000	94	July . . .	2,998,000	95
August . . .	5,995,000	94	August . . .	3,001,000	95
September . . .	6,181,000	97	April . . .	3,062,000	97
March . . .	6,190,000	97	June . . .	3,087,000	98
February . . .	6,194,000	97	March . . .	3,100,000	99
June . . .	6,208,000	97	February . . .	3,115,000	99
January . . .	6,243,000	98	January . . .	3,129,000	99
April . . .	6,442,000	101	May . . .	3,135,000	100
May . . .	6,576,000	103	September . . .	3,145,000	100
December . . .	6,640,000	104	October . . .	3,311,000	105
October . . .	6,907,000	108	December . . .	3,253,000	104
November . . .	7,041,000	110	November . . .	3,420,000	109

Difference: Highest and Lowest Month, £1,057,000.
Mean of extreme Variations for 1895-1900, 8%.

Difference: Highest and Lowest Month, £422,000.
Mean of extreme Variations for 1895-1900, 7%.

TABLE 17 (*continued*).

1845-

(Specie held,

BANK OF ENGLAND.				SCOTLAND.				
RATE OF DISCOUNT, 1845-1900.		NOTE CIRCULATION, 1845-1900.		SPECIE HELD, 1846-1900.				
Month.	Av. for the Fifty-six Years, £3 12s.	Av. of Fifty- six Years =100.	Month.	Average for the Fifty-six Years, £5,164,000 =100.	Av. of Fifty- six Years =100.	Month.	Average for the Fifty-five Years, £3,362,000. =100.	Av. of Fifty- five Years =100.
July .	3 4 6	89	March .	4,754,000	92	April .	3,111,000	93
August .	3 6 4	92	April .	4,826,000	93	March .	3,149,000	94
June .	3 6 7	92	February .	4,852,000	94	February .	3,230,000	96
September .	3 6 7	92	August .	5,059,000	98	August .	3,244,000	96
April .	3 6 10	93	September .	5,072,000	98	September .	3,259,000	97
March .	3 9 0	96	January .	5,087,000	99	July .	3,344,000	99
May .	3 11 0	99	July .	5,173,000	100	October .	3,353,000	100
February .	3 11 3	99	October .	5,222,000	101	January .	3,360,000	100
October .	3 17 3	108	May .	5,223,000	101	May .	3,368,000	100
January .	3 19 1	110	June .	5,520,000	107	June .	3,572,000	106
December .	4 1 10	113	December .	5,590,000	109	November .	3,676,000	109
November .	4 3 8	116	November .	5,593,000	109	December .	3,679,000	110

Difference: Highest and Lowest Month, 19s. 2d.
Mean of extreme Variations for 1845-1900, 73 5/8%.

Difference: Highest and Lowest Month, £530,000.
Mean of extreme Variations for 1845-1900, 8 5/8%.

Difference: Highest and Lowest Month, £568,000.
Mean of extreme Variations for 1846-1900, 8 5/8%.

CH. XII] MONTHLY AVERAGES, BANK RATE, NOTES, &c.

TABLE 17 (*continued*).

1900.

(1846-1900.)

IRELAND.			SPECIE HELD, 1846-1900.		
NOTE CIRCULATION, 1845-1900.					
Month.	Average for the Fifty-six Years, £6,313,000.	Average of Fifty-six Years =100.	Month.	Average for the Fifty-five Years, £2,599,000.	Average of Fifty-five Years =100.
August . . .	5,798,000	92	August . . .	2,442,000	94
July . . .	5,876,000	93	July . . .	2,452,000	94
September . . .	5,881,000	93	September . . .	2,469,000	95
June . . .	6,096,000	97	June . . .	2,528,000	97
March . . .	6,306,000	100	May . . .	2,560,000	99
April . . .	6,377,000	101	April . . .	2,565,000	99
May . . .	6,405,000	101	March . . .	2,609,000	100
February . . .	6,416,000	102	October . . .	2,635,000	101
January . . .	6,468,000	102	February . . .	2,648,000	102
October . . .	6,508,000	103	January . . .	2,699,000	104
December . . .	6,721,000	107	November . . .	2,782,000	107
November . . .	6,901,000	109	December . . .	2,794,000	108
Difference: Highest and Lowest Month, £1,103,000. Mean of extreme Variations for 1845-1900, 8 5 1 / 2 .			Difference: Highest and Lowest Month, £354,000. Mean of extreme Variations for 1846-1900, 7 1 / 2 .		

CHAPTER XIII

RETURNS OF THE LONDON BANKERS' CLEARING HOUSE

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THE returns of the London Bankers' Clearing House provide one of the best sources of information we possess as to the activity of business in this country, and to those periods of the year when that activity is greatest. Much may be learned from the monthly returns of exports and imports published by the Board of Trade, but the Clearing House returns bring the main points as to activity of business together in the most distinct form available.

In order to show these points clearly these returns have been tabulated, and as far as possible formed into groups of years corresponding to those into which the other tables in this volume are arranged (Table 18). In the case of the Clearing House returns, however, there was this difficulty: while the other tables are carried back to 1844 and 1845, the Clearing House returns have only been published continuously onwards from 1868. To make the figures correspond as far as possible, the first seven years, 1868-74, were brought into one group. This enabled the remaining years to be divided in the same manner as the corresponding periods have been in the other tables.

The averages shown are the monthly averages of the turnover at the Clearing House. Being thus taken out in months, they are in the aggregate the twelfth part of the actual turnover.

TABLE 18.

Monthly Averages of London Bankers' Clearing House Returns 1868-1900, in groups of Seven Years, 1868-74; Ten Years, 1875-84; Ten Years, 1885-94; and Six Years, 1895-1900; with Summary Table, 1868-1900.

Month.	1868-74.		1875-84.		1885-94.		1895-1900.	
	Average for the Seven Years, £398,669,000. = 100.	Av. of Seven Years = 100.	Average for the Ten Years, £464,863,000. = 100.	Av. of Ten Years = 100.	Average for the Ten Years, £549,514,000. = 100.	Av. of Ten Years = 100.	Average for the Six Years, £696,890,000. = 100.	Av. of Six Years = 100.
January .	6	6	112	112	105	105	107	107
February .	354,609,000	89	451,494,000	97	549,991,000	100	643,889,000	95
March .	412,781,000	104	495,646,000	106	593,010,000	108	712,738,000	105
April .	417,886,000	105	457,057,000	98	531,620,000	97	623,821,000	92
May .	386,194,000	97	485,025,000	104	555,367,000	101	702,252,000	104
June .	375,597,000	94	454,716,000	98	524,401,000	95	651,879,000	96
July .	456,721,000	115	473,489,000	102	581,656,000	106	718,389,000	106
August .	387,185,000	97	450,427,000	97	534,846,000	97	668,793,000	99
September .	386,693,000	97	407,233,000	88	497,521,000	91	608,945,000	90
October .	408,231,000	102	484,328,000	104	568,144,000	103	709,243,000	105
November .	391,855,000	98	443,605,000	96	530,912,000	97	687,504,000	102
December .	420,971,000	106	452,644,000	97	550,183,000	100	672,368,000	99
Difference : Highest and Lowest Month, £102,112,000.	Difference : Highest and Lowest Month, £115,386,000.		Difference : Highest and Lowest Month, £105,489,000.		Difference : Highest and Lowest Month, £113,815,000.		Mean of extreme Variations for 1868-74, 13%.	
Mean of extreme Variations for 1868-74, 13%.	Mean of extreme Variations for 1875-84, 8%.		Mean of extreme Variations for 1885-94, 8-5%.		Mean of extreme Variations for 1895-1900, 8-5%.			

Month.	1868-1900.		Average of Thirty-three Years, £514,991,000. = 100.
	Average for the Thirty-three Years, £514,991,000. = 100.	Average of Thirty-three Years = 100.	
January .	546,216,000	106	
February .	495,728,000	96	
March .	547,044,000	106	
April .	501,657,000	97	
May .	524,872,000	102	
June .	494,897,000	96	
July .	547,234,000	106	
August .	502,296,000	97	
September .	466,837,000	91	
October .	534,521,000	104	
November .	593,457,000	98	
December .	515,129,000	100	• • •

Difference : Highest and Lowest Month, £80,397,000.
Mean of extreme Variations for 1868-1900, 9-5%.

But the proportions which they show of the fluctuations resulting correspond. That the basis is accurate is shown by comparing the averages in Table 18, p. 133, with the actual averages of the periods given. The figures are as follows:—

LONDON CLEARING HOUSE.

MONTHLY AVERAGES.		ANNUAL AVERAGES.	
1868-1874	£398,666,000 = 100	1868-1874	£4,815,144,000 = 100
1875-1884	464,863,000 = 116	1875-1884	5,567,045,000 = 116
1885-1894	549,514,000 = 138	1885-1894	6,599,638,000 = 137
1895-1900	676,890,000 = 170	1895-1900	8,144,458,000 = 169

It will be observed from Table 18 that the mean of the extreme variations of the turnover of the Clearing House has gradually diminished during the period tabulated. In this respect what has occurred differs from the results shown by the variations in the discount rate at the Bank of England, which, with the exception of the period 1895-1900, have continually increased in intensity during the corresponding time, as shown in Table 12, p. 97, and Table 36, pp. 192, 193—having been increasing from 1845 onwards.

BANK OF ENGLAND RATE OF DISCOUNT.

Periods.	Mean of the extreme Variations during each period.
1845-54	7
1855-64	11.5
1865-74	17.5
1875-84	18.5
1885-94	25
1895-1900	21.5

LONDON BANKERS' CLEARING HOUSE.

Periods.	Mean of the extreme Variations during each period.
1868-74	13
1875-84	12
1885-94	8.5
1895-1900	8.5

As it may be convenient to follow the progress of the turnover of the London Clearing House, the total returns from 1868 to 1900 are given.

LONDON BANKERS' CLEARING HOUSE RETURNS, 1868-1900.

Year.	Totals for the Year.	Proportion of amount in each year to £568. 1868=100.	Year.	Totals for the Year.	Proportion of amount in each year to 1868.
1868	3,425,185,000	100	1885	5,511,071,000	161
1869	3,626,396,000	106	1886	5,901,925,000	172
1870	3,914,220,000	114	1887	6,077,097,000	177
1871	4,826,934,000	141	1888	6,942,172,000	203
1872	5,916,452,000	172	1889	7,618,766,000	223
1873	6,070,946,000	177	1890	7,801,048,000	228
1874	5,936,772,000	173	1891	6,847,506,000	200
1875	5,585,793,000	166	1892	6,481,562,000	190
1876	4,663,480,000	145	1893	6,478,014,000	189
1877	5,042,383,000	147	1894	6,337,222,000	185
1878	4,992,398,000	146	1895	7,562,884,000	222
1879	4,885,937,000	143	1896	7,574,833,000	221
1880	5,794,238,000	169	1897	7,491,281,000	219
1881	6,357,059,000	185	1898	8,097,291,000	237
1882	6,221,206,000	181	1899	8,150,269,000	268
1883	5,929,404,000	173	1900	8,960,170,000	262
1884	5,798,555,000	169			

As a period of active business is generally reflected in the discount market by a high rate, it might have been expected that the months in which most activity was shown in the clearings would be the months which showed the highest rate of discount. But this is not the case. The months in which on average for the fifty-six years, 1845-1900, the highest rates of discount have been charged are the months of October, November, December, and January—the three months at the close and the earliest month of the year. But the clearing returns show a generally different range of activity. According to them the months of greatest business activity are January, March, May, July, and October—the first and third months at the commencement of the year, the second month of the second quarter, the first month of the second half year, and the first month of the last quarter. January, July and March are all on a level, October comes next, and then May. It is easy to understand that these months may very well be periods of business activity, but it is not so easy to understand why this being the case the charges for discount at the Bank of England do not correspond. The activity of business is indicated by the amount of the cheques in circulation, and it might naturally have been expected that higher rates of discount would follow if these depended only on the demands of business. It may be remarked, in passing, that the highest months in the returns of the Banks of France, Germany, Holland and Belgium more or less correspond with each other, and that at none of these banks are the months of October and November marked by such exceptionally high rates as at the Bank of England. In all of them the winter months—and in the case of France and Holland the months of early spring also—are months of higher rates than the remainder of the year. These points are of importance so far as they appear to imply that the requirements of the Bank Acts of 1844-5 exercise an influence over the rate of discount charged in this country by causing the rate at some periods of the year to be higher than it naturally would have been owing to the demands made through the operation of the Act on the reserve of the Bank. This point is more fully discussed in Chapters IX. and XIX., p. 81 and p. 190.

Table 15, with the monthly averages of the Scotch note circulation and of the specie held against it, shows (pp. 118-120) what the requirements for specie for Scotland were in May, June, November and December. Table 16, pp. 121-3, gives the corresponding information for Ireland. Table 17, pp. 124-131, compares these points with the Bank rate. The months of maximum circulation were not precisely the same in Scotland and Ireland, but for the autumn and winter they fairly correspond.

To facilitate comparison the proportions of the average rate of discount of each month to the annual average discount rate at the Banks of England, France, Germany, Holland and Belgium are added, with the corresponding proportions of the turnover at the Clearing House in London.

Proportion of Average Monthly Discount Rate to Average Annual Rate, fifty-six years at Banks of England, France, Germany, Holland, Belgium fifty years, and of Monthly Average to Yearly Average at London Bankers' Clearing House thirty-three years.

Month.	BANK OF ENGLAND (See Table 12) Average of Fifty-six Years = 100.	BANK OF FRANCE (See Table 21) Average of Fifty-six Years = 100.	BANK OF GERMANY (See Table 25) Average of Fifty-six Years = 100.	BANK OF HOLLAND (See Table 30) Average of Fifty-six Years = 100.	BANK OF BELGIUM (See Table 39) Average of Fifty Years = 100.	LONDON CLEARING HOUSE (See Table 18) Average of Thirty-three Years = 100.	Month.
January .	110	106	106	106	104	106	January
February .	99	104	97	103	99	96	February
March .	96	101	94	99	95	106	March
April .	93	98	94	96	95	97	April
May .	99	98	96	97	98	102	May
June .	92	95	96	94	96	96	June
July .	89	95	97	95	96	106	July
August .	92	96	96	96	97	97	August
September .	92	96	100	96	98	91	September
October .	108	103	107	101	104	104	October
November .	116	106	109	107	110	98	November
December .	113	105	110	110	108	100	December

There is but little to show what the transactions of the Clearing House were earlier than the year 1868. It is stated in the minutes of evidence taken before the Committee of the House of Commons on the Bank of England Charter, 1832 (No. 3,624, p. 258), that in 1810 "the daily amount of the transactions of the Clearing House varied from £5,000,000 to £15,000,000, and that the amount of bank notes paid were from £250,000 to £500,000." The amount passed by the principal banking houses in London at the Clearing House in 1839 is given as £941,401,600 (*Principles of Money*, by John Wade, 1842, p. 29). These indications are too slight to build any useful inferences on them as to the course of business in the

first half of last century. The figures for 1868, however, given on p. 134, allow us to form a rough estimate of the amount in 1861, and the following table (Table 19) enables us to compare the exports and imports, the amount of the clearing, and the total bank note circulation of the United Kingdom at every decade from 1861 to 1900. It will be seen from this that during the forty years over which the table extends, while the exports and imports collectively increased in the proportion of from 100 to 244, the total amount of the clearings increased in the proportion of from 100 to 320—a far larger proportion—while the note circulation had only extended from 100 to 124, an increase of only about half the growth of the exports and imports. It is in the clearings that the great extension has taken place, the paper circulation of the country being now for practical purposes mainly in cheques, against which, it may be remarked in passing, no adequate specie reserve has been provided.

TABLE 19.

Exports and Imports of United Kingdom, Amounts passed through the London Clearing House, and the Total Bank Note Circulation of all the Issuing Banks in the United Kingdom for the years 1861, 1871, 1881, 1891, and 1900.

Year.	Declared Value of Exports and Imports (See Note 1).	Increase of Exports and Imports, 1861=100.	Amount of Clearing in the Year stated.	Increase of Clearing since 1861, 1861=100.	Decimal Proportion of Total Exports and Imports to Clearing.	Total Bank Note Circula- tion in the United Kingdom.	Increase in Bank Note Cir- culation since 1861, 1861=100.	Year.
1861.								
Exports	£ 125,100,000							
Imports	183,000,000							
Total	308,100,000	100	£ (say) 2,800,000,000†	100	.110	36,585,000	100	1861
1871.								
Exports	223,100,000							
Imports	270,500,000							
Total	493,600,000	160	4,826,000,000	170	.103	42,060,000	115	1871
1881.								
Exports	234,000,000							
Imports	333,900,000							
Total	567,900,000	184	6,357,000,000	227	.89	41,791,000	114	1881
1891.								
Exports	247,000,000							
Imports	373,500,000							
Total	620,500,000	201	6,848,000,000	245	.91	40,296,000	110	1891
1900.								
Exports	201,192,000							
Imports	459,897,000							
Total	751,085,000	244	8,960,000,000	320	.84	45,460,000	124	1900

NOTE 1.—The re-exports of foreign and colonial produce is deducted from the imports in this statement, thus showing the net amount of imports retained in the country.

† Estimated amount of the clearing.

CHAPTER XIV

THE AUTUMNAL DRAIN

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THIS name is given to a movement of coin throughout the country in the months of autumn, which sometimes reaches very considerable proportions. It takes its origin, no doubt, from the requirements of the season, which stimulate employment in agriculture, and set large masses of the population free for an autumnal holiday. The following statement shows the movement of specie from the Bank of England for the years from 1881 to 1900:—

TABLE 20.
Statement showing the Autumnal Movements in Gold and Silver Coin held by the Bank of England for the years 1881-1900—beginning of September to about the middle of November in each year.

Year.	GOLD COIN.					SILVER COIN.
	Received from or taken for Abroad on Balance.	Taken for Scotland on Balance.	Taken for Ireland on Balance.	Received from or taken for Home Circulation on Balance.	Total Decrease.	
1881	Recd. from	Taken for		Recd. from	Taken for	
	£	£	£	£	£	£
1881	... 1,772,000	811,000	430,000	... 788,000	3,801,000	60,000
1882	... 417,000	838,000	610,000	... 880,000	2,745,000	19,000
1883	... 413,000	795,000	180,000	... 873,000	2,261,000	92,000
1884	... 1,460,000	705,000	270,000	... 935,000	3,430,000	67,000
1885	... 754,000	660,000	1,110,000	... 252,000	2,776,000	13,000
1886	259,000	... 717,000	330,000	... 391,000	1,179,000	28,000
1887	353,000	... 575,000	25,000	... 363,000	630,000	57,000
1888	... 2,513,000	445,000	420,000	... 689,000	4,067,000	141,000
1889	... 2,431,000	612,000	300,000	... 640,000	3,983,000	414,000
1890	... 2,009,000	616,000	480,000	... 1,215,000	4,320,000	174,000
1891	... 1,471,000	478,000	320,000	... 288,000	2,559,000	77,000
1892	... 1,856,000	533,000	235,000	... 720,000	3,344,000	158,000
1893	65,000	... 800,000	440,000	724,000	...	451,000
1894	74,000	... 584,000	300,000	...	530,000	5,564,000
1895	... 3,329,000	964,000	178,000	... 1,213,000	5,684,000	104,000
1896	... 1,453,000	539,000	108,000	... 348,000	7,448,000	27,000
1897	... 928,000	625,000	300,000	... 137,000	2,970,000	4,000
1898	... 773,000	829,000	345,000	... 6,523,000	3,470,000	131,000
1899	... 4,905,000	515,000	357,000	... 1,149,000	6,926,000	132,000
1900	... 1,052,000	926,000	330,000	163,000	...	2,145,000

NOTE.—The figures printed in thick type in the column "Silver Coin," represent an increase.

There is thus an internal ebb of gold in autumn. A corresponding influx to the extent of from two to three millions takes place between the months of May and June.

The effect of this autumnal pressure was described in 1857 by the late Mr. William Langton, to the Statistical Society of Manchester (*Transactions*, Session 1857-8), and the investigation was carried on, with his accustomed ingenuity and research, by Professor W. S. Jevons, 1866 (*Statistical Society of London: Journal*, vol. xxix.). The pressure is enhanced by the requirements of the Bank Acts of 1844-5, acting through the movements of the Scotch and Irish issues. See Tables 15, 16, 17, pp. 118-131.

An amount of gold has to be brought from the Bank of England to Scotland and Ireland corresponding, on average, with the amount of notes in circulation. An examination of the figures contained in Table 20 will show how this works out. The amounts for 1881 and 1882 will serve as examples.

1881.	Gold taken for abroad	£1,772,000
	Do. home circulation	788,000
		<hr/>
	Do. Scotland	£811,000
	Do. Ireland	430,000
		<hr/>
1882.	Gold taken for abroad	£1,241,000
	Do. home circulation	889,000
		<hr/>
	Do. Scotland	£838,000
	Do. Ireland	610,000
		<hr/>
		£1,448,000 £2,745,000

The amounts moved to Scotland and Ireland are taken out of the reserve of the Bank under the provisions of the Acts of 1844-5. In 1881 more than a third of the total, in 1882 more than half the total of what was thus drawn was taken under this influence.

On an average, for the years 1846-1900, the rate of discount charged by the Bank of England was higher during the autumn months, and particularly in November, in connection with this movement. A somewhat similar movement is traceable in the returns of the Banks of France, Germany, Holland and Belgium.

(For further information see Palgrave, *Dictionary of Political Economy*, article on "Autumnal Drain"; Jevons, *Investigations in Currency and Finance*, London, 1884; and R. H. Inglis Palgrave, *Evidence before Select Committee of House of Commons, Banks of Issue*, 1875.)

CHAPTER XV

VARIATIONS IN THE RATE CHARGED BY THE BANK OF FRANCE FROM 1844 TO 1900

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[Amounts in Francs converted as 25=£1.]

CHAPTER X. contained a statement, Table 13, pp. 98, 99, of the variations in the rate of discount charged by the Bank of England from 1844 to 1900, commencing with the date when the Act of 1844 came into force. That date was selected as the starting-point of this inquiry, because before that period it had scarcely been the custom of the Bank of England to make any variation at all in its rate. On some occasions, particularly in 1839, a higher rate was charged, but the regular Bank rate was $\frac{1}{4}$ per cent. The market rate might be something very different, but the Bank did not concern itself with that. If the market rate was as high or higher than the Bank rate, the Bank was resorted to for discount purposes; but if the market rate was lower, the Bank did not reduce its rate accordingly. Earlier than the date from which that table starts—September 5th, 1844—the rate charged by the Bank of

England is no guide to the market rate, and hence it was of no service to pursue the investigation further back than that time.

The same date was taken for the starting-point of the tables of the rate of the Bank of France, as has been done with the Banks of Germany and Holland, in order to facilitate comparison between the operations of the different banks. The Bank of Belgium did not commence operations till 1850.

For a long time before 1844, in France as generally speaking, in England, the rate of the bank had not varied from 4 per cent. It stood at that point at the Bank of France from 1820 to January, 1847.

The tables of the rates charged by the Bank of France correspond in arrangement exactly with those relating to the Bank of England. The first table, No. 21, p. 142, gives the average rate of discount charged month by month by the Bank of France during the period from 1845 to 1900, in groups of ten years each from 1845-54 to 1885-94, and for the six years 1895-1900. It also shows the proportion which the rate charged in each group of ten years bore to the average rate of the period. A summary table shows the average monthly rates for the whole period, 1845-1900. Table No. 22, pp. 144, 145, gives the number of changes of the rate in each year, and the total number of days at each rate in each year. A supplementary table, No. 23, p. 146, shows the number of days at each rate arranged from the greatest number of days which each rate lasted to the smallest, and the number of days at each rate arranged from the lowest rate to the highest.

Before commencing this comparison, it will be desirable to give some description of the organisation of the Bank of France. The direction of the bank consists of the following persons:—First, there is a governor and two sub-governors; all these three are nominated by the Government, and are understood to be removable at its pleasure, but this power, as a matter of fact, is not exercised. Then there are fifteen directors, who are elected by the proprietors. Three of these directors must be selected from the class of the receivers-general, who are connected with the Government, and the management of the taxes of the country. The *receveurs généraux*, or *téresdriers payeurs généraux*, as they are more

TABLE 21.

'Monthly Averages of Minimum Rate of Discount of Bank of France 1845-1900, in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900.'

Month.	1845-54.		1855-64.		1865-74.		1875-84.	
	Average for the Ten Years, £3 10s. 9d.	Avg. of Ten Years = 100.	Average for the Ten Years, £4 14s. 1d.	Average of Ten Years = 100.	Average for the Ten Years, £3 18s. 1d.	Average of Ten Years = 100.	Average for the Ten Years, £3 22s. 1d.	Average of Ten Years = 100.
January	4 0 1	101	5 1 9	107	4 3 11	106	3 8 0	110
February	4 2 0	103	4 18 8	104	4 0 6	102	3 7 7	109
March	4 0 4	101	4 16 8	102	3 17 8	99	3 4 10	105
April	4 0 0	101	4 8 0	93	3 16 0	97	3 1 3	99
May	3 18 10	98	4 11 7	96	3 16 9	97	3 0 9	98
June	3 18 0	98	4 8 5	93	3 14 0	94	2 17 0	92
July	3 18 0	98	4 8 0	93	3 14 10	94	2 17 0	92
August	3 18 0	98	4 7 3	92	3 17 9	99	2 18 0	92
September	3 18 0	98	4 8 0	93	3 17 0	98	2 18 0	93
October	3 19 9	100	4 19 11	105	4 1 7	103	3 1 4	99
November	4 0 0	101	5 6 8	112	4 4 1	107	3 6 0	106
December	4 0 11	102	5 3 0	108	4 3 0	105	3 6 0	106
Difference: Highest and Lowest Month, 4%.		Difference: Highest and Lowest Month, 19s. 9d.		Difference: Highest and Lowest Month, 10s. 1d.		Difference: Highest and Lowest Month, 11s. 1d.		
Mean of extreme Variations for 1845-54, 3·5%		Mean of extreme Variations for 1855-64, 10%		Mean of extreme Variations for 1865-74, 6·5%		Mean of extreme Variations for 1875-84, 9%		

Month.	1885-94.		1895-1900.		1845-1900.		
	Average for the Ten Years, £2 17s. 9d.	Average of Ten Years = 100.	Average for the Six Years, £2 8s. 8d.	Average of Six Years = 100.	Average for the Fifty-six Years, £3 11s. 9d.	Average Rate of Fifty-six Years = 100.	
January	2 19 9	104	2 11 9	106	3 15 10	106	
February	2 17 8	100	2 9 7	102	3 14 4	104	
March	2 17 0	99	2 9 3	101	3 12 6	101	
April	2 17 0	99	2 8 4	99	3 9 10	98	
May	2 16 8	98	2 8 2	99	3 10 3	98	
June	2 16 0	97	2 6 8	96	3 8 1	95	
July	2 16 0	97	2 6 8	96	3 8 2	95	
August	2 16 0	97	2 6 8	96	3 8 7	96	
September	2 17 1	99	2 6 8	96	3 8 11	96	
October	2 19 8	103	2 8 1	99	3 13 5	103	
November	3 0 0	104	2 10 0	103	3 16 3	106	
December	2 19 10	104	2 12 7	108	3 15 5	105	
Difference: Highest and Lowest Month, 4%.		Difference: Highest and Lowest Month, 5s. 1d.		Difference: Highest and Lowest Month, 5s. 2d.		Difference: Highest and Lowest Month, 5s. 2d.	
Mean of extreme Variations for 1885-94, 3·5%		Mean of extreme Variations for 1895-1900, 6%		Mean of extreme Variations for 1845-1900, 5·5%		Mean of extreme Variations for 1845-1900, 5·5%	

properly called, are the Government or Treasury Agents in the Departments. Five of the twelve remaining directors must be taken from among merchants, manufacturers, and leading business men in Paris. Besides these there are the three censors, who must be chosen from among men engaged in business and manufactures, and who thus specially represent the manufactures and the industry of Paris. The governor, the two sub-governors, and the fifteen directors form the general council. Nothing is done without the presence and the surveillance of the censors, who have not the right to vote, though they may speak and place their opinions on the minutes of the deliberations. Great part of the detail of the management rests with the two sub-governors, but the directors have the right to decide and vote on any measure which may come before them. The directors are understood rather to act as checks on the two sub-governors than to be the actual managers of the business themselves. The system is understood to work well in practice, and the mixture of the more permanent portion of the governing body, which is selected by the Government, with the portion which is selected by the shareholders themselves, is an advantage in enabling a regular system of management to be steadily carried on from year to year. The number of the places at which banking facilities were given by the Bank of France at the date of its report in 1902 was 411, divided thus:—

1	Central Office.
126	Branches.
50	Auxiliary Offices.
234	Towns connected.
<hr/>	
411	Places recognised as in connection with the bank.

The branches and places connected with the bank include all the principal cities and towns of the country. Some of the branches carry on a very large business, and the amount of the business done by them in the aggregate considerably exceeds that done by the head office at Paris. Some of the branches, however, are small. It was mentioned in the report for 1902 that no fewer than ten of them were carried on at

TABLE 22.

BANK OF FRANCE

Changes in the Rate of Discount Charged by the
since the 5th September, 1844 (when the Bank Act

Years.	Number of Changes.			1 2%	2 1%	3 %	3 1%	4 %
	Rise.	Fall.	Total.	Days.	Days.	Days.	Days.	Days.
1844	No change		—	—	—	—	—	117
1845	No change		—	—	—	—	—	365
1846	No change		—	—	—	—	—	365
1847	1	2	—	—	—	—	—	18
1848	No change		—	—	—	—	—	366
1849	No change		—	—	—	—	—	365
1850	No change		—	—	—	—	—	365
1851	No change		—	—	—	—	—	365
1852	1	1	—	—	303	—	—	63
1853	1	1	2	—	279	—	—	86
1854	1	1	2	—	—	—	—	253
1855	2	2	—	—	—	—	—	277
1856	1	1	2	—	—	—	—	—
1857	4	4	8	—	—	—	—	—
1858	—	4	4	—	99	105	112	—
1859	1	1	2	—	123	149	93	—
1860	1	—	1	—	—	317	—	—
1861	4	3	7	—	—	—	—	—
1862	1	3	4	—	—	224	104	—
1863	5	3	8	—	—	35	176	—
1864	4	7	11	—	—	—	—	—
1865	2	4	6	—	126	84	70	—
1866	2	5	7	—	123	85	108	—
1867	—	2	2	—	214	151	—	—
1868	No change		—	—	366	—	—	—
1869	No change		—	—	365	—	—	—
1870	4	—	4	—	199	—	3	9
1871	1	1	2	—	—	—	—	—
1872	—	1	1	—	—	—	—	—
1873	2	2	4	—	—	—	—	—
1874	—	2	2	—	—	—	—	210
1875	No change		—	—	—	—	—	—
1876	—	1	1	—	219	—	—	365
1877	—	1	1	270	95	—	—	147
1878	1	—	1	289	76	—	—	—
1879	1	1	2	153	212	—	—	—
1880	1	1	2	—	196	92	78	—
1881	2	—	2	—	—	—	237	56
1882	—	3	3	—	—	—	283	20
1883	—	1	1	—	—	311	54	—
1884	No change		—	—	—	366	—	—
1885	No change		—	—	—	365	—	—
1886	No change		—	—	—	365	—	—
1887	No change		—	—	—	365	—	—
1888	2	2	4	—	210	47	21	4
1889	—	2	2	—	—	327	14	24
1890	No change		—	—	—	365	—	—
1891	No change		—	—	—	365	—	—
1892	—	1	1	—	226	140	—	—
1893	No change		—	—	365	—	—	—
1894	No change		—	—	365	—	—	—
1895	—	1	1	292	73	—	—	—
1896	No change		—	366	—	—	—	—
1897	No change		—	365	—	—	—	—
1898	—	—	1	292	—	73	—	—
1899	2	—	2	—	—	341	14	—
1900	1	3	4	—	—	129	112	13
	48	63	111	2,027	2,579	5,557	1,815	4,516

TABLE 22—*continued.*

RATE OF DISCOUNT, 1844-1900.

Bank of France, and the Number of Days at Each Rate in Each Year,
came into Operation in England), to 31st December, 1900.

$4\frac{1}{2}\%$	5%	$5\frac{1}{2}\%$	6%	$6\frac{1}{2}\%$	7%	$7\frac{1}{2}\%$	8%	$9\frac{1}{2}\%$	Total.	Years
Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	
—	—	—	—	—	—	—	—	—	117	1844
—	—	—	—	—	—	—	—	—	365	1845
—	—	—	—	—	—	—	—	—	365	1846
347	—	—	—	—	—	—	—	—	365	1847
—	—	—	—	—	—	—	—	—	366	1848
—	—	—	—	—	—	—	—	—	365	1849
—	—	—	—	—	—	—	—	—	365	1850
—	—	—	—	—	—	—	—	—	365	1851
—	—	—	—	—	—	—	—	—	366	1852
—	—	—	—	—	—	—	—	—	365	1853
—	—	—	—	—	—	—	—	—	365	1854
—	—	—	—	—	—	—	—	—	365	1855
—	14	—	74	—	—	—	—	—	365	1856
—	178	—	188	—	—	—	—	—	365	1857
—	2	109	188	8	12	21	9	16	365	1858
12	37	—	—	—	—	—	—	—	365	1859
—	—	—	—	—	—	—	—	—	366	1860
49	—	—	—	—	—	—	—	—	365	1861
2	229	11	58	—	65	—	—	—	365	1862
16	21	—	—	—	—	—	—	—	365	1863
14	85	—	6	—	49	—	—	—	365	1864
9	14	—	163	—	148	—	32	—	366	1865
40	45	—	—	—	—	—	—	—	365	1866
7	42	—	—	—	—	—	—	—	365	1867
—	—	—	—	—	—	—	—	—	366	1868
—	—	—	—	—	—	—	—	—	365	1869
—	10	—	144	—	—	—	—	—	365	1870
—	106	—	259	—	—	—	—	—	365	1871
—	308	—	58	—	—	—	—	—	366	1872
—	321	—	32	—	12	—	—	—	365	1873
91	64	—	—	—	—	—	—	—	365	1874
—	—	—	—	—	—	—	—	—	365	1875
—	—	—	—	—	—	—	—	—	365	1876
—	—	—	—	—	—	—	—	—	365	1877
—	—	—	—	—	—	—	—	—	365	1878
—	—	—	—	—	—	—	—	—	365	1879
—	—	—	—	—	—	—	—	—	366	1880
—	72	—	—	—	—	—	—	—	365	1881
—	54	—	—	—	—	—	—	—	365	1882
—	—	—	—	—	—	—	—	—	365	1883
—	—	—	—	—	—	—	—	—	366	1884
—	—	—	—	—	—	—	—	—	365	1885
—	—	—	—	—	—	—	—	—	365	1886
—	—	—	—	—	—	—	—	—	365	1887
84	—	—	—	—	—	—	—	—	366	1888
—	—	—	—	—	—	—	—	—	365	1889
—	—	—	—	—	—	—	—	—	365	1890
—	—	—	—	—	—	—	—	—	365	1891
—	—	—	—	—	—	—	—	—	366	1892
—	—	—	—	—	—	—	—	—	365	1893
—	—	—	—	—	—	—	—	—	365	1894
—	—	—	—	—	—	—	—	—	365	1895
—	—	—	—	—	—	—	—	—	366	1896
—	—	—	—	—	—	—	—	—	365	1897
10	—	—	—	—	—	—	—	—	365	1898
11	—	—	—	—	—	—	—	—	365	1899
—	—	—	—	—	—	—	—	—	365	1900
353	2,061	120	1,170	8	286	21	41	16	20,570	

TABLE 23.

Bank of France—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the highest number to the smallest.

Number of Days (20,570).	Rate Per Cent.	Number of Days=1,000.
5,557	3	270
4,516	4	221
2,579	2½	126
2,061	5	100
2,027	2	98
1,815	3½	88
1,170	6	57
353	4½	17
286	7	14
120	5½	6
41	8	2
21	7½	1
16	9	—
8	6½	—
<hr/>		
20,570		1,000

Bank of France—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the lowest rate to the highest.

Rate Per Cent.	Number of Days (20,570).	Number of Days=1,000.
2	2,027	98
2½	2,579	126
3	5,557	270
3½	1,815	88
4	4,516	221
4½	353	17
5	2,061	100
5½	120	6
6	1,170	57
6½	8	—
7	286	14
7½	21	1
8	41	2
9	16	—
<hr/>		
20,570		1,000

a loss, which in the aggregate was more than £3,000. Some of these branches have not been long established. They give collectively very valuable assistance to the trade of the country, and it is certain that without them the position of the bank would be very inferior to that which it holds at the present time. The best description, perhaps, which can be given of the mode in which the business of the bank is carried on is to be found in the evidence given by M. Rouland, the late governor of the bank, before the official "Enquête sur les principes et les faits généraux qui régissent la circulation monétaire et fiduciaire," held in Paris in 1865. Though this inquiry took place some years since, it is understood that the general arrangements at the present day remain very much what they were then. M. Rouland, in describing the organisation of the governing body of the bank, stated that it consisted of two perfectly distinct elements, one being the portion chosen by the State, and the other chosen by the shareholders. The persons chosen by the State, namely, the governor and the two sub-governors, are, according to M. Rouland's words, bound to see that the business of the bank is carried on for the public advantage. It is their duty to see that the statutes of the bank are not overstepped, and that the interests of trade and commerce are attended to. It is from them that the proposals to raise or to lower the rate of interest appear almost invariably to proceed. M. Rouland's account was as follows :—"Nothing of any description which concerns the great interests of the public, nothing which concerns the larger duties which the Bank has to perform towards commerce and industry, nothing of all that class of business belongs to or is left to the discretion of what he called the interested party." By this M. Rouland understood that portion of the governing body which directly represented the shareholders.

"This is a guarantee," M. Rouland continued, "which ought, of itself, to satisfy any who have any doubts on the subject. Does the public know it? Are the public aware that during sixty-two years it has not perhaps happened twice that the council has had to propose that the rate of discount should be raised or lowered? Does the public know that it is always the active element of the Government, which, watching

vigilantly over the public interest, has made the proposition?"

M. Rouland proceeded to say that the two portions of the governing body have always worked together in the most perfect harmony, and that in this harmony of the two portions of the governing body the security of the institution consists.

M. Rouland spoke, and with a just sense of pride, of the part which the Bank of France had always taken in developing the commerce and industry of that country. Opinions have, however, been occasionally expressed that the commercial element is not sufficiently represented in the general council of management of the bank, and that it would be desirable to choose a greater number of representatives of various branches of business to form part of the direction.

This opinion is referred to here, but it is only right to add that the Bank of France has for many years carried on its business with great intelligence and judgment in the most essential points. In particular its management during the period of suspension of specie payments in France, from 1870 to 1874-5, a period of the greatest difficulty, was a brilliant example of what the conduct of a bank should be under exceptionally trying circumstances. Again in November, 1890, at the time of the Baring difficulty, the assistance which the Bank of France gave to the Bank of England, and the three millions sterling in gold which it lent at that time, were of the greatest assistance in enabling the Bank of England to avert the crisis which seemed so near and was so much dreaded.

The business of banking has not, it must be remembered, hitherto reached in France anything like the same proportions which it has done in Great Britain and Ireland. There are few banks in France at all to be compared with the great banks of England, Scotland, and Ireland. Of these larger banks, the "Comptoir d'Escompte," the "Crédit Lyonnais," and the "Société Générale" are the most important, and do a considerable business, principally in the larger towns, and there is besides a large number of very respectable private firms who carry on banking business with much success and solidity. The idea of banking is different in France from that held in this country; cheques are still comparatively little used. Specie and the notes of the Bank of France are still the

means used for the payment of debts, not cheques, as with us. But no bank in France possesses anything like the organisation of the Bank of France, and its position is a very different one from that of the Bank of England in respect of its influence over trade throughout the country. Besides Paris, the bank provided banking facilities in the year 1902 at 411 places in France, including all the most important centres, such as cities like Lyons, Marseilles, Bordeaux, Havre, Lille, and Roubaix, down to quite small towns in remote districts. At all the offices business in discounts and advances is transacted at the same rates as in Paris. The Bank of France thus regulates the charges for the use of money throughout the country.

The amounts of the balances kept by other banks with the Bank of France have never been published in the same manner as those kept by the London bankers with the Bank of England formerly were, and hence it is not possible to speak on the subject with any certainty; nor is it likely that they approach anything like the same sums. From both these reasons, and from the general circumstances of the trade of the country, the Bank of France is not exposed to anything like the same sudden demands as the Bank of England. The current of commercial activity in France flows with a very different and more equitable course than in England. A country which depends so greatly on agriculture as France, where manufactures, commerce, and trade with other countries fill relatively so much smaller a space in the general activity of the people than they do in England, will always be likely to follow a more undisturbed course in the way of business than is, or can be, the case here. There are much fewer causes to lead to the vast demands for bullion for export, which occasionally operate so suddenly and so powerfully on our market. The sums on deposit with banks in France are, beyond question, both smaller in proportion to the numbers and to the general wealth of the population than in England, and they are also more generally deposited for longer periods than with us, and are much less likely to be suddenly required to be repaid. All these circumstances unite in causing the demands on the Bank of France to be of a totally different description from the demands on the Bank of England, and it is only natural to find that this

difference is reflected in the variations of the rate of interest charged by the two banks. The average rate of discount charged by the Bank of France has been as nearly as possible on a level with that charged by the Bank of England for the period under consideration, the figures being £3 12s. for the Bank of England, and £3 11s. 9d. for the Bank of France, but the duration of extremely high and extremely low rates has been much shorter in France than in England. Thus, the rate of the Bank of France has been oftener at 3 per cent. during the period under notice than at any other rate, and next to that rate 4 per cent. shows the highest proportion. A firm which did business with the Bank of England would have been able to discount its bills at 3 and $2\frac{1}{2}$ per cent. for a greater length of time than it would have been charged the same rates by the Bank of France. Between the 1st September, 1844, and the 31st December, 1900, which includes 20,570 days, the rate ruled at 3 per cent. and below for 11,341 days at the Bank of England, while it stood at corresponding rates for 10,163 days at the Bank of France, but while the Bank of England charged 4 per cent. for 2,698 days, the same rate was charged by the Bank of France for 4,516 days. The number of days at 5 per cent. was much the same at both banks, 2,012 at the Bank of England, and 2,061 at the Bank of France. In the highest rates of all, the customers of the Bank of France would have had the advantage. The Bank of France has never raised its rate above 9 per cent., but the Bank of England has charged 10 per cent. for 141 days. The Bank of France charged rates from $6\frac{1}{2}$ to 9 per cent. for 372 days only, but the Bank of England charged rates from $6\frac{1}{2}$ to 10 per cent. for 1,172 days. This means that during the fifty-six years under consideration a customer of the Bank of France would have had to pay high rates for about one year, while the customer of the Bank of England would have had to pay still higher rates for more than three. The fluctuations in the rate charged by the Bank of France have also been much less violent than those in the rate of the Bank of England. Tables 37 and 38, on pp. 196, 197, make this very clear. Thus the fluctuation at the Bank of England has in one year been as great as $6\frac{1}{2}$ per cent., but at the Bank of France the

fluctuation has never been more than 5 per cent., and in very few years has it exceeded 2 per cent.

The number of variations in the rate has been much smaller in France than in England. During the period between 1844 and 1900 the Bank of France altered its rate 111 times; the Bank of England altered its rate 400 times. The greatest number of variations in the rate of the Bank of England took place in 1873, when there were no less than 24 changes; during that year the Bank of France altered its rate 4 times only. The greatest number of changes in the rate of the Bank of France took place in 1864, when there were 11 changes, but in that year there were 15 alterations at the Bank of England. There is also another curious difference in the course of business in the two countries to be noted. While during quite recent years the number of alterations in the rate charged by the Bank of England remains on average quite as great as in the earlier years under notice, being 193 between 1844 and 1872, and 207 between 1873 and 1900, the changes in the rate of the Bank of France have much diminished in number, having been 77 in the former period and only 35 in the later. We will take the period from 1890 onward:—

YEARS 1890-1900.

BANK OF ENGLAND.	No. of Changes in Rate.	BANK OF FRANCE.	No. of Changes in Rate.
Years.		Years.	
1890	11	1890	No change
1891	10	1891	No change
1892	4	1892	1
1893	12	1893	No change
1894	2	1894	No change
1895	No change	1895	1
1896	3	1896	No change
1897	6	1897	No change
1898	6	1898	1
1899	6	1899	2
1900	6	1900	4
Changes in rate	66	Changes in rate	9

While the average rate charged by the Bank of France, taking the whole time from 1845 onwards into consideration, has been closely on a level with the rate charged by the Bank of England, it is especially noticeable that the rates charged by the Bank of France have been lower than those of the Bank of England during the years of panic which have occurred in England during the same period. Thus, to compare the rates

in England and France during the years 1847, 1857, 1866, and 1890 we find :—

BANK OF ENGLAND.		Rate of Discount		BANK OF FRANCE.		Rate of Discount
Year.		£ s. d.		Year.		£ s. d.
1847	.	5 3 6		1847	.	4 19 0
1857	.	6 13 3		1857	.	6 3 0*
1866	.	6 19 0		1866	.	3 14 0
1890	.	4 10 5		1890	.	3 0 0

The division of the accounts of the Bank of England between the Issue and the Banking Departments may have had something to do with this.

It is a remarkable thing that there should have been so great a difference in the rate of discount charged during the year 1866 in two great centres of business activity situated so close to each other and connected by so many bonds of commercial intercourse. In the year 1878 a similar divergence took place ; the rate of the Bank of England was £3 15s. 8d., of the Bank of France only £2 4s. 2d. for that year. The year 1890 was the one of the Baring difficulty. The Bank of France assisted the Bank of England with a loan of three millions, but its rate remained unchanged at 3 per cent. during the whole twelvemonth, while the rate at the Bank of England averaged £4 10s. 5d. It appears, however, that there has been on the whole of late years a tendency towards a greater correspondence in the rate of interest charged in both countries. These points will be discussed further in Chapter XX., p. 203, in which the fluctuations between the rates of the different banks referred to are collectively examined into.

The reserve in the precious metals held by the Bank of France has of late years greatly increased. The details are stated in Table 24, p. 153.

The Bank of France, we must remember, has had to pass through very great trials during recent years. Changes in the form of government, revolutions, wars, and even hostile occupation, have all disturbed the even course of life in Paris and in France. The Bank of France has had to bear many trials of this description, and has met them all with great courage and prudence.*

* For further information see Reports of Bank of France, translated in August numbers of *Bankers' Magazine*.

TABLE 24.

Gold and Silver held by the Bank of France, 1877-1900.

Alterations in amounts of Gold and Silver held from December 31, 1877, to December 31, 1900; the year 1877 is taken as the starting point, being the earliest from which the Statement can be carried on continuously:—

Years Compared.	Gold.		Silver.	
	Increase. £	Decrease. £	Increase. £	Decrease. £
1878 with 1879	—	7,200,000	7,780,000	—
1879 with 1878	—	9,680,000	6,780,000	—
1880 with 1879	—	7,568,000	—	232,000
1881 with 1880	3,736,000	—	—	2,636,000
1882 with 1881	12,356,000	—	—	2,746,000
1883 with 1882	—	136,000	—	3,596,000
1884 with 1883	2,004,000	—	1,236,000	—
1885 with 1884	6,152,000	—	2,208,000	—
1886 with 1885	3,116,000	—	2,256,000	—
1887 with 1886	—	5,100,000	2,000,000	—
1888 with 1887	—	3,984,000	1,520,000	—
1889 with 1888	10,228,000	—	568,000	—
1890 with 1889	—	5,660,000	—	56,000
1891 with 1890	8,664,000	—	476,000	—
1892 with 1891	14,724,000	—	572,000	—
1893 with 1892	—	96,000	—	228,000
1894 with 1893	14,332,000	—	—	932,000
1895 with 1894	—	4,420,000	—	136,000
1896 with 1895	—	1,532,000	—	284,000
1897 with 1896	1,340,000	—	—	892,000
1898 with 1897	—	5,084,000	12,000	—
1899 with 1898	1,920,000	—	—	2,156,000
1900 with 1899	18,716,000	—	—	2,084,000
Deduct	£97,288,000	£50,460,000	£25,408,000	£15,972,000
Total increase between Dec. 31, 1877, and Dec. 31, 1900.	£46,828,000	—	£9,436,000	—
Amount in 1877	£46,544,000	—	£34,544,000	—
" " 1900	93,372,000	—	43,980,000	—
More in 1900	£46,828,000	—	£9,436,000	—

During the years 1899-1900 the silver diminished more than £4,000,000, while the gold increased more than £20,000,000 during the same period.

On December 31, 1902, the gold held was £100,768,000, the silver £45,936,000, the total being £144,704,000.

CHAPTER XVI

VARIATIONS IN THE RATE CHARGED BY THE IMPERIAL BANK OF GERMANY FROM 1844 TO 1900

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CHAPTERS X. and XV., pp. 95, 140, contained an account of the variations in the rate of interest charged by the Bank of

England from 1844 to 1900, and by the Bank of France during the same period. It is desirable to continue this part of the investigation by a similar inquiry into the rates charged during the same time by the Bank of Germany. Strictly speaking, we ought to speak of the Bank of Prussia and the Bank of Germany. Originally founded by Frederick II., King of Prussia, in 1765, as a State institution, under the title of the Royal Bank, it continued till 31st December, 1846, when it was reconstituted with the admission of shareholders, and became a note-issuing bank. Organised in this manner, the Bank of Prussia continued its operations steadily till 31st December, 1875, when the German Bank Act of that year altered its constitution entirely, and greatly enlarged its sphere of work. From being the financial institution of a comparatively restricted country, the Reichsbank became the centre of the monetary operations of a great empire at the time when the standard of value of that empire was changed from Silver to Gold. It is now one of the great banks of Europe, and therefore we have placed its present name, that of the Imperial Bank of Germany, at the head of this chapter. The same dates and the same method exactly have been followed in constructing the tables which accompany this chapter as with those which were drawn up in the description of the rates charged and the fluctuations in them in the case of the other banks whose operations are described, in order that the comparison made may follow precisely the same plan in all cases, and enable the reader to see how far and to what extent the same causes have operated in all the countries referred to.

The first table, No. 25, p. 156, gives the average rate of discount charged, month by month, by the Bank of Germany during the period from 1845 to 1900; it also shows the proportion which the rate charged in each month bore to the average rate of the year. A summary at the end of the table shows the average monthly rates for the whole period, 1845-1900. Table No. 26, p. 157, gives the number of changes of the rate in each year and the total number of days at each rate in each year. A supplementary table, No. 27, p. 158, shows the number of days at each rate, arranged from the lowest rate to the highest, and the number of days at each rate,

TABLE 25.

Monthly Averages of Minimum Rate of Discount of Bank of Germany, 1845-1900,
in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of
Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	1845-54.		1855-64.		1865-74.		1875-84.	
	Average for the Ten Years, £4 6s. 5d.	Av. of Ten Years = 100.	Average for the Ten Years, £4 9s.	Average of Ten Years = 100.	Average for the Ten Years, £4 12s. 2d.	Average of Ten Years = 100.	Average for the Ten Years, £4 5s. 1d.	Average of Ten Years = 100.
January	4 6 0	103	4 10 4	101	4 15 10	104	4 10 5	106
February	4 8 0	102	4 6 6	97	4 7 9	95	4 2 10	97
March	4 6 4	100	4 5 9	97	4 4 4	91	3 19 4	94
April	4 6 0	100	4 5 0	96	4 6 0	93	3 18 0	92
May	4 4 10	98	4 6 5	97	4 12 8	100	3 19 2	93
June	4 4 0	97	4 6 0	97	4 14 0	102	3 17 11	92
July	4 5 8	99	4 5 2	96	4 15 11	104	3 19 1	93
August	4 5 0	98	4 4 7	95	4 10 8	98	4 2 6	97
September	4 4 0	97	4 8 8	99	4 7 8	95	4 11 9	108
October	4 7 8	101	4 14 11	106	4 16 8	105	4 16 7	114
November	4 8 0	102	4 17 9	110	4 17 4	106	4 13 6	110
December	4 8 0	102	4 17 5	109	4 18 7	107	4 10 1	106
Difference: Highest and Lowest Month, 5s.			Difference: Highest and Lowest Month, 13s. 2d.			Difference: Highest and Lowest Month, 14s. 3d.		
Mean of extreme Variations for 1845-54, 3%			Mean of extreme Variations for 1855-64, 7 1/2%			Mean of extreme Variations for 1865-74, 6%		

Month.	1885-94.		1895-1900.		1845-1900.			
	Average for the Ten Years, £3 13s. 1d.	Average of Ten Years = 100.	Average for the Six Years, £4 15s. 2d.	Average of Six Years = 100.	Average for the Fifty-six Years, £4 5s. 1d.	Average of Fifty-six Years = 100.		
January	4 1 2	111	4 15 1	113	4 10 0	106		
February	3 9 3	95	4 0 3	95	4 2 7	97		
March	3 7 6	92	3 15 0	89	4 0 1	94		
April	3 7 1	92	3 15 11	90	3 19 11	94		
May	3 7 8	92	3 15 9	90	4 1 6	90		
June	3 8 0	93	3 15 5	90	4 1 3	96		
July	3 8 0	93	3 15 8	90	4 2 0	97		
August	3 9 5	95	3 16 7	91	4 1 10	96		
September	3 13 2	100	4 1 6	97	4 4 8	100		
October	3 18 10	108	4 14 3	112	4 11 4	107		
November	4 2 0	112	5 0 2	119	4 12 7	109		
December	4 4 9	116	5 5 0	125	4 13 2	110		
Difference: Highest and Lowest Month, 27s. 8d.			Difference: Highest and Lowest Month, £1 10s.			Difference: Highest and Lowest Month, 13s. 3d.		
Mean of extreme Variations for 1885-94, 18%			Mean of extreme Variations for 1895-1900, 18%			Mean of extreme Variations for 1845-1900, 8%		

IMPERIAL BANK OF GERMANY. RATE OF DISCOUNT.

TABLE 26.

Changes in the Rate of Discount Charged by the Bank of Germany, and the Number of Days at Each Rate in Each Year, from 5th September, 1844 (when the Bank Act came into Operation in England), to 31st December, 1900.

Years	No. of changes			3 %	3½ %	4 %	4½ %	5 %	5½ %	6 %	6½ %	7 %	7½ %	8 %	9 %	Total	Years		
	Rise	Fall	Total	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Years		
1844	I	—	I	—	—	—	41	76	—	—	—	—	—	—	—	—	117	1844	
1845	I	I	2	—	—	—	204	78	83	—	—	—	—	—	—	—	365	1845	
1848	I	I	2	—	—	—	121	—	244	—	—	—	—	—	—	—	365	1848	
1847	—	I	1	—	—	—	—	122	243	—	—	—	—	—	—	—	305	1847	
1848	I	I	2	—	—	—	—	256	110	—	—	—	—	—	—	—	365	1848	
1849	—	I	1	—	—	—	—	314	51	—	—	—	—	—	—	—	305	1849	
1850	No	change	—	—	—	—	365	—	—	—	—	—	—	—	—	—	365	1850	
1851	No	change	—	—	—	—	365	—	—	—	—	—	—	—	—	—	366	1851	
1852	No	change	—	—	—	—	366	—	—	—	—	—	—	—	—	—	365	1852	
1853	I	—	I	—	—	—	273	—	92	—	—	—	—	—	—	—	365	1853	
1854	—	I	I	—	—	—	234	—	131	—	—	—	—	—	—	—	365	1854	
1855	I	—	I	—	—	—	310	55	—	—	—	—	—	—	—	—	365	1855	
1858	3	I	4	—	—	—	121	7	138	—	100	—	—	—	—	—	365	1858	
1857	4	2	6	—	—	—	—	—	162	32	82	45	—	44	—	—	365	1857	
1858	I	4	5	—	—	—	330	—	19	11	—	5	—	—	—	—	365	1858	
1859	I	I	2	—	—	—	293	—	72	—	—	—	—	—	—	—	365	1859	
1860	No	change	—	—	—	—	306	—	—	—	—	—	—	—	—	—	365	1860	
1881	No	change	—	—	—	—	395	—	—	—	—	—	—	—	—	—	365	1882	
1862	No	change	—	—	—	—	365	—	—	—	—	—	—	—	—	—	365	1883	
1863	I	—	I	—	—	—	397	58	—	—	—	—	60	—	—	—	366	1884	
1864	3	I	4	—	—	—	—	124	128	—	54	—	—	—	—	—	365	1865	
1865	3	2	5	—	—	—	193	—	64	—	21	—	—	—	—	—	365	1866	
1868	I	7	8	—	—	—	18	45	87	—	79	—	68	—	5	63	1867		
1867	No	change	—	—	—	—	365	—	—	—	—	—	—	—	—	—	366	1868	
1868	No	change	—	—	—	—	366	—	—	—	—	—	—	—	—	—	365	1869	
1869	I	—	I	—	—	—	277	—	88	—	—	—	—	—	—	—	365	1870	
1870	2	3	5	—	—	—	150	—	163	—	20	—	—	—	32	—	365	1871	
1871	—	2	2	—	—	—	300	14	51	—	—	—	—	—	—	—	365	1872	
1872	I	—	I	—	—	—	260	—	106	—	—	—	—	—	—	—	366	1873	
1873	3	4	7	—	—	—	53	98	128	—	86	—	—	—	—	—	365	1874	
1874	2	2	4	—	—	—	257	14	56	—	38	—	—	—	—	—	365	1875	
1875	2	3	5	—	—	—	168	—	131	—	66	—	—	—	—	—	366	1876	
1876	3	3	6	—	—	—	54	210	67	19	16	—	—	—	—	—	365	1877	
1877	3	4	7	—	—	—	214	33	78	40	—	—	—	—	—	—	365	1878	
1878	I	2	3	—	—	—	220	41	104	—	—	—	—	—	—	—	365	1879	
1879	2	3	5	145	—	—	283	22	29	32	—	—	—	—	—	—	366	1880	
1880	2	3	5	—	—	—	233	—	80	52	—	—	—	—	—	—	365	1881	
1881	2	I	3	—	—	—	182	—	159	—	17	—	—	—	—	—	365	1882	
1882	2	2	4	—	—	—	348	—	17	—	—	—	—	—	—	—	365	1883	
1883	—	I	I	—	—	—	366	—	—	—	—	—	—	—	—	—	366	1884	
1884	No	change	—	—	—	—	•303	37	25	—	—	—	—	—	—	—	365	1885	
1885	I	2	3	—	—	—	240	71	41	—	13	—	—	—	—	—	365	1886	
1888	3	2	5	—	—	—	113	—	18	—	—	—	—	—	—	—	365	1887	
1887	—	2	2	—	—	—	234	—	80	25	—	—	—	—	—	—	366	1888	
1888	2	—	2	—	—	—	261	—	52	12	89	—	—	—	—	—	365	1889	
1889	2	2	4	—	—	—	212	—	216	—	68	81	—	—	—	—	365	1890	
1890	2	I	3	—	—	—	91	10	252	—	12	—	—	—	—	—	366	1891	
1891	I	3	4	—	—	—	75	—	—	—	—	—	—	—	—	—	366	1892	
1892	I	I	2	—	—	—	115	—	108	—	142	—	—	—	—	—	365	1893	
1893	2	I	3	—	—	—	329	—	27	—	9	—	—	—	—	—	365	1894	
1894	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	365	1895
1895	I	—	I	—	—	—	315	—	50	—	82	—	—	—	—	—	366	1896	
1896	2	I	3	—	—	—	208	—	76	—	50	10	42	—	—	—	365	1897	
1897	2	2	3	149	43	—	73	—	100	—	—	—	—	—	—	—	365	1898	
1898	4	2	6	50	—	—	213	—	50	10	42	—	—	—	—	—	365	1899	
1899	4	3	7	—	—	—	41	126	92	—	94	—	12	—	—	—	365	1900	
1900	—	3	3	—	—	—	—	—	178	160	15	—	12	—	—	—	365	1900	
	76	85	161	2,640	178	11,077	1,439	3,648	430	730	60	234	44	37	63	20,570	—	—	

arranged from the greatest number of days which each rate lasted to the smallest.

The Imperial Bank of Germany is, like the Bank of France, under the control of the State. The Bank Act of 1875 directs the manner in which this control is exercised (see pars. 25-31, pp. 158, 159). The business is also regulated in some points by the Bank Act of 1899.

TABLE 27.

Imperial Bank of Germany—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the highest number to the smallest.

Number of Days (20,570).	Rate Per Cent.	Number of Days = 1,000.
11,077	4	540
3,648	5	177
2,640	3	129
1,439	4½	70
730	6	35
430	5½	21
234	7	11
178	3½	9
63	9	3
50	6½	2
44	7½	2
37	8	1
<hr/>		1,000
20,570		

Imperial Bank of Germany—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the lowest rate to the highest.

Rate Per Cent.	Number of Days (20,570).	Number of Days = 1,000.
3	2,640	129
3½	178	9
4	11,077	540
4½	1,439	70
5	3,648	177
5½	430	21
6	730	35
6½	50	2
7	234	11
7½	44	2
8	37	1
9	63	3
<hr/>		1,000
20,570		

Section 25. The Imperial supervision over the Reichsbank is exercised by a Bank-Curatorium,* comprising the Chancellor of the Empire, as President, and four other members. One of these four members is named by the Emperor, the other three by the Federal Council. This Curatorium meets

* A Board of Inspectors.

once a quarter. At these meetings a report is given of the condition of the bank and everything connected; it also receives a general account of all the operations and business arrangements of the bank.

Section 26. The Imperial direction of the bank is exercised by the Chancellor of the Empire and, under him, by the Board of Directors of the Imperial Bank. Should the Chancellor be hindered from exercising his functions, the Emperor will name a substitute.

The Chancellor directs the entire administration of the bank, subject to the provisions of this Act and the regulations which may be published in accordance with Section 40.* He issues the directions for the Imperial Board of Directors and for the branch institutions, as well as the rules and instructions for the officials of the bank, and directs the required alterations in the existing business arrangements and in the instructions to the officials.

Section 27. The Imperial Board of Directors is the administrative and executive authority of the bank, and also represents it in public. It consists of a president and the required number of members, and passes its resolutions by a majority of votes; but its proceedings are subject to the prescriptions and instructions of the Chancellor of the Empire.

The President and members of the Board of Directors of the Imperial Bank are appointed for life by the Emperor on the recommendation of the Federal Council.

Section 28. The officials of the Imperial Bank have the rights and duties of Imperial functionaries. The bank undertakes their salaries, pensions, and other payments for services, as well as the pensions and assistance given to their surviving relatives. The salaries and pensions of the Bank Directors are fixed yearly by the Imperial Budget; those of the other officials by the Emperor, yearly, in agreement with the Federal Council on the motion of the Imperial Chancellor. No official of the bank may hold its shares.

Section 29. The accounts of the Imperial Bank must be submitted to the Court of Accounts of the German Empire. The Chancellor will determine the form of the yearly accounts. The decisions on this point are to be communicated to the Court of Accounts.

Section 30. The shareholders take part in the administration of the bank through the General Meetings, and a Central Committee elected from their numbers according to the following regulations:—

* *Section 31.* The Central Committee is the permanent representative of the shareholders in relation to the administration. It consists of fifteen members, besides whom fifteen substitutes are to be chosen. The members and the substitutes are chosen by the General Assembly out of the number of those among the shareholders who have at least three shares in their names. All the members and substitutes must reside within the Empire, and at least nine members and nine substitutes in Berlin. One-third of the members retire annually, but are eligible for re-election. The Central Committee meets at least once a month, presided over by the President of the Board of Directors of the Bank, who may also summon extraordinary meetings. The quorum at these meetings will be at least seven members. The arrangements of the business will determine when and in what turn the substitutes of members are called up.

This section directs the details of the bank management.

The Imperial Bank carries on a very considerable business in Berlin, and has also branches which form a network covering the whole of Germany. Including Berlin, there were in 1902 376 offices of the Reichsbank. In this latter respect the business which the Bank of Germany carries on corresponds more closely with that of the Bank of France than with that of the Bank of England. The number of variations in the rate of discount at the Bank of France and at the Bank of Germany also corresponds more closely in number than those at the Bank of England between 1844 and the close of the year 1900. There were 111 alterations in the rate recorded at the Bank of France and 161 at the Bank of Germany during those years; while the Bank of England altered its rate 400 times during the same time.

The year 1872 marks the date of the introduction of the gold standard into Germany. It could hardly have been expected that so colossal an operation, perhaps the largest of its kind which modern times have ever witnessed, could have been carried into effect without great disturbances of the money market in the countries employing a gold currency. This doubtless accounts for much of the unsteadiness of our money market during the years 1872-5, and for many of the alterations in the rate of discount charged at Berlin during the same period.

The business of banking is, on the whole, more developed in Germany than in France. There are considerable banks in Hamburg, Frankfort, Bremen, and in other cities of North Germany, besides many carrying on business in Berlin. Hence the Bank of Germany has to meet more competition than the Bank of France.

The business carried on by the Bank of Germany corresponds, as mentioned before, more closely with that carried on by the Bank of France than with that of the Bank of England. As in France, the charges for advances and discounts made at the head office correspond with those made at all the branches. Both the Banks of France and Germany have many branches, many more than the Bank of England; both of them do a large business in remitting sums of money from one part of the country to another, and the bills which both of them deal

with in the way of their business are comparatively small in amount. The average amount of the inland bills dealt in by the Bank of Germany in 1900 was £85 4s. for each bill. The average amount of the trade bills discounted at Paris by the Bank of France in 1900 was £29 3s. 3d. The average amount of the bills dealt in by the Bank of England is believed to be much larger than either of these sums.

The business of the Imperial Bank of Germany on current accounts (*Giro Verkehr*) has considerably increased during recent years. This is the branch of the business in which the greatest development has occurred, it having increased tenfold between 1876 and 1900. In its present form the system only dates from 1876; the enormous extension it has received shows how greatly such a method of making payments was required in a country with large business transactions, and in which cheques are but little used, notes and specie being generally employed. It was established as a means for facilitating payments between persons in different parts of the empire, and for economising the use of specie in these transactions. In this it has been especially successful. The sums paid in specie have dropped from being 39·5 per cent. of the whole in 1876 to 16·8 per cent. in 1900. It is true that the actual amounts paid in specie have largely increased; they were £330,000,000 in the course of 1876, and £1,372,000,000 in 1900; but while there is a substantial increase in most years during the whole period, the payments in specie have not increased by any means so much as the total sums, which have increased from £836,000,000 in 1876 to £8,182,000,000 in 1900. Hence while the totals have increased nearly tenfold, the payments in specie have increased only foursfold. The current accounts connected with this branch of the business have likewise greatly increased in number; from being only 3,245 in 1876, they have increased to 15,847 in 1900. The average amount to the credit of these accounts has also largely developed; from being £3,529,000 in 1876, it had increased to £25,619,000 in 1900.

It is impossible in this place to go more into detail on this point. The advantage resulting to business has been extraordinary from the convenience thus given in remitting money

through book entry from one part of the empire to another. For example, if A B in Leipzig wishes to make a payment to C D in Berlin, he can pay the amount into the office of the Reichsbank at Leipzig, and on the following day the amount is credited to C D on his current account in Berlin. The person making the payment need not have an account at the bank. The transfers are made without charge.

The next point to be considered is the note circulation. It is needful to premise before commenting on this that the note circulation is a far more important factor in business transactions in Germany than it is with us. Here cheques, not notes, are the recognised medium for business payments. If a sudden increase occurs in the amount of cheques paid away no one takes any notice of it, or is even conscious of the circumstance. All that happens is that the clearing-house returns are augmented, and that the banks on which the cheques are drawn make provision for meeting them. This is merely a private matter between the banks and their customers. No one else is concerned. It is quite a different thing when notes are in general use, especially when, as in Germany, the issuing bank is compelled, before placing its notes in circulation, to make provision according to the law as to the reserves held against them, and is compelled also to observe whether or not the amount issued exceeds the limit allowed by the law. This was originally fixed in Germany by the Bank Act of 1875. By that law also the issue of small notes was discontinued. From and after the year 1876 no notes were allowed to be issued below the value of 100 marks (£5), and the bank was compelled to observe regulations as to the conduct of the business which were designed to cause it to keep its assets in as fluid a condition as possible, thus enabling it to be always ready to meet any demands which might be made on it, including those which might arise from the note circulation.

The limit of uncovered issue—that is, of notes beyond the amount against which specie and legal tender money was required to be held in certain proportions—was fixed by the Bank Law in 1875 at £12,500,000 for the Reichsbank, increased by the lapse of the issues of other banks, to £14,811,450 in 1896,

and by the Act of 1899 to £22,500,000. As the last-named extension of the limit, however, did not come into force till a later period than that we are now considering, no further reference need be made to it here. The principle is the same, whatever the actual amount may be. Beyond the fixed limit the bank was allowed to put notes into circulation on payment of a tax of 5 per cent. on the excess issue, with the proviso that specie to the extent of one-third of the total issue should always be kept in the vaults of the bank, and that against the remainder good bills should be held. Though a charge of 5 per cent. was not high, it was sufficient to keep the bank from desiring to exceed the authorised issue, and for this reason: if the charge for the advance on which the excess issue was based did not exceed 5 per cent., the bank made practically no profit from the transaction. If, however, a rate sufficiently high to enable the bank to make a profit was to be charged, it would be so high as to discourage the would-be borrower from seeking to obtain the accommodation. It has hence been only on public grounds, from a desire to facilitate business generally, that the Reichsbank allowed the legal limit of its note circulation to be exceeded.

This system of allowing an issue of notes beyond the limit fixed by the laws on payment of a moderate tax on the notes put into circulation, was established in contradistinction to the English system, which, through the arrangements of the Act of 1844, fixed an impassable boundary for the circulation of the Bank of England, and eventually annihilated the elasticity of the English note circulation. The German legislators observed that the absolute restriction of the amount of the uncovered note issue of the Bank of England on several occasions had the effect of intensifying crises. The fear that the Bank might reach the limit of its note circulation, and in consequence might be compelled to suspend the supply of its notes, which through their legal-tender character stand on the same level as the standard of value, had in critical times caused a panic-stricken multitude to throng to the counters of the Bank of England, seeking, while it was yet time, to provide themselves, through discounting bills, borrowing on stock and similar methods, with a sufficiency of the legal-tender circulating medium. In order

that the panic might be appeased it has been necessary in England, as we all know, to grant permission that the Act of 1844, which governs the limit of the uncovered note issue, should, if necessary, be suspended, although it was only on one occasion, in 1857,* that the law was actually infringed. Permission to do this was given in 1847, 1857, and 1866.† These experiences, and the dread of the injury hence resulting to trade, caused the authors of the German Bank Law to seek out a different way by which they might meet the emergency, whenever it arose in an automatic manner, without needing to have recourse to parliamentary authority. They did not make the permitted amount of note circulation a fixed and rigid thing, but they allowed the Reichsbank to exceed the fixed limit of its note circulation when the circumstances of trade required it. This power was, however, regulated by the imposition of the tax of 5 per cent., as mentioned above, on the excess of notes beyond the limit. The Reichsbank was thus compelled to connect the fact that it had overpassed the legal limit with raising the rate of discount at least to 5 per cent.

In considering this arrangement it must again be remembered how absolutely different is the place which the note circulation takes in business matters in Germany from that which it holds in England, where in times of difficulty the position of the Bank of England note as a legal tender, and thus as representing gold, causes it to be sought for. In Germany notes are employed generally where cheques are used with us for ordinary business transactions—for the common requirements of the day. If they cannot be supplied all business comes to a standstill, hence as business develops the note circulation increases, and tends to pass beyond limits which were adequate twenty-five years ago.

The development of the note circulation is shown in Table 29, p. 169. The extent by which the legal limit was overpassed between 1881—the first year in which an excess issue occurred—and 1900, is given in the statements on pp. 169–171.

* See statement, note, p. 89.

† This subject is also mentioned in Chapter IX., p. 88. The Act of Indemnity required in 1857 is printed at p. 91, and the bill proposed in 1873 by Lord Sherbrooke to meet similar difficulties is printed at p. 93.

The German Bank Law requires, in any case, that cash should be held up to one-third of the note circulation. The average cover was in practice considerably more than this, having been in

	Per cent.
1876	24'55
1880	76'47
1885	80'57
1890	81'41
1895	92'35
1900	71'77

Thus the requirements of the Bank Law were in this respect amply fulfilled. The limit of the uncovered note circulation, owing to the vast development of the business of the empire, gradually became too narrow, as is shown by Table 29, p. 169, which gives the history of the growth of the note circulation. That this was not the cause of great disturbance to the business world arose from the fact that the Directory of the Reichsbank met the requirements of the time, which drove the circulation above the legal limit, by raising the rate of discount to 5 per cent. only, and further, out of consideration to the general interests of trade, paid the tax on the excess out of its own resources. Thus the Reichsbank, while undertaking the whole responsibility for the excess issue, and the risks of the extended business which compelled it to be made, received little or no profit from the transaction, while it had to bear all the expenses incurred, including the risk of bad debts. It was not, as will easily be understood, able indefinitely to continue this consideration for the common good. It has been stated recently that the customers of the Reichsbank have latterly had to pay the 5 per cent. duty on the over-issues, and the amount, duration, and extent of the excesses over the limit increased so greatly after the year 1895, that in the course of the year 1898 there were sixteen, and in the years 1899 and 1900 twenty occasions on which the note circulation exceeded the limit. Between 1896 and 1900 the Reichsbank had to pay the note-tax every quarter. In the year 1899 the excess continued during the whole of the fourth quarter of the year, and in 1900 during the same period, except for one return.

In order to make the working of the note circulation of

the Reichsbank clear, it is advisable to point out the essential difference between the manner in which our own fiduciary Bank of England allowance, now £18,175,000, and the German allowance, originally of £12,500,000 and now of £22,500,000, are treated.* The Bank of England "issues" the £18,175,000 permanently, whether the amount of bullion held is large or small, whether the public requires the notes or not. The Bank of Germany only issues the notes when they are wanted, and not permanently, exactly as it treats the excess issue. The Bank of England issues the notes which are not wanted by the public to itself—they form the "reserve" of the Bank. When the "reserve" is exhausted, no more notes can be obtained except by bringing in more bullion, which can be put behind a further issue of notes,—and for this there is not time during a crisis,—or by suspending the law which regulates the note circulation. Our system thus creates an amount of legal-tender money in reserve which is absolutely limited in amount. The German system has an equally available amount of issue in reserve, far less strictly limited, the amount of which is not shown in the published accounts. Beyond this there is the power of issue practically of any amount over the legal limit, provided that one-third of the amount of the notes in circulation is held by the bank in cash, and that the tax of 5 per cent. is paid on the excess issue. There are thus three limitations on the note issue of the Reichsbank. The first is the legal limit, now £22,500,000, the second the tax of 5 per cent. on any excess over this limit, the third the necessity of holding one-third of the whole circulation in cash.

The largest branches of the liabilities of the Imperial Bank have now been explained. The most important business on the credit side of the accounts of a note-issuing bank, and of the Imperial Bank in particular, is the discount of bills. Through its dealings with these securities, the bank not only finds the means for employment of the capital at its disposal, but also for meeting demands which may be made on it. On average nearly 80 per cent. of its profit is derived from this source, while, through the rapidity with which the bills held fall due, the bank can at any time supply itself with cash by

* *Die Reichsbank, Berlin, 1876-1900* (p. 8 ff.).

simply declining to discount and allowing the bills it holds to mature. The bills form the largest part of the provision made for meeting the demands which may be made on account of the notes. The bank is bound by law to hold in its coffers, in legal-tender notes of the empire, in gold bars or foreign coins valued at £69 12s. for a pound (German) of fine gold, at least one-third of the amount of the notes in circulation. The remainder of the amount of the notes must be represented by discounted bills.

The bank deals both with inland and with foreign bills; of these, on average, 99 per cent. are inland bills, only about 1 per cent. usually being foreign bills. For the year 1900, however, the proportion of the foreign bills dealt with was larger, being rather more than 3 per cent. The actual figures of the bills held December 31, 1900, were as follows:—

FROM BALANCE SHEET, BANK OF GERMANY, DECEMBER 31, 1900.

Bills due within fifteen days . . .	£18,755,070
Bills due at later dates . . .	31,931,194
	—————
	£50,686,264
Bills on foreign places—	
England	3,734,120
Other foreign places . . .	39,159
	—————
	3,773,279
Total	£54,459,543

The great rapidity with which the securities held by the bank can be turned into cash is obvious from this statement. It will be seen that one-third of the whole amount of the bills held became due within fifteen days. A very large proportion of the bills fall due within even a shorter time than this, the proportion being—

Within 7 days	19·6 per cent.
Over 7, but within 14 days	11·2 "
Over 14 days, but within 4 weeks	16·7 "
Over 2 months	52·5 "
Average number of days the bills collectively have to run, 33.	

Thus it will be seen that one-fifth of the total amount of bills falls due within seven days, and about half, including these, within four weeks. It is difficult to imagine a bill-case of a bank

in better condition in this respect. The large amount of bills held on England shows the importance which the Reichsbank ascribes to possessing the means of checking any movement of the exchange in favour of England, and which may draw gold from Germany. As a rule, not less than 80 per cent. of the foreign bills held by the bank are bills drawn on England.

Contemporaneously with the growth in *Giro Verkehr* business and in the note circulation, the amount of specie held has largely increased. The following table shows the yearly average of the coin and bullion, commencing with the establishment of the Reichsbank. From 1894 onwards the manner in which the accounts have been made up enables us to separate the holdings in gold from the remainder of the specie.

TABLE 28.
Coin and Bullion, 1876-1900.

Date.	Gold held 31st December of each Year.	German Current Coin also held 31st December of each Year.	Yearly average of published Weekly Returns.	% Proportion of average each year to 1876.
1876	£ 2,144,170	*22,885,816	25,529,644	1876 = 100
1877	3,597,363	19,015,688	26,155,178	102
1878	2,004,126	21,601,193	24,703,583	97
1879	2,976,609	23,993,692	29,715,844	116
1880	3,386,225	22,736,639	28,104,538	110
1881	3,556,659	22,170,518	27,837,475	109
1882	7,393,024	20,548,404	27,449,237	107
1883	5,764,282	22,164,870	30,093,258	118
1884	3,590,755	22,300,570	29,586,246	116
1885	9,685,330	21,226,709	29,306,530	115
1886	14,377,533	19,097,954	34,655,264	135
1887	17,111,381	21,230,575	38,618,130	151
1888	21,815,444	21,108,600	45,170,134	177
1889	12,233,435	24,496,533	43,579,583	171
1890	11,826,844	26,107,945	40,950,956	157
1891	17,601,253	27,403,189	44,689,455	175
1892	16,231,622	25,666,842	47,103,709	185
1893	16,911,652	*22,975,239	42,294,395	165
1894	35,721,800	+14,989,200	46,716,380	183
1895	28,547,150	14,106,700	50,588,150	198
1896	26,569,350	13,659,450	44,599,400	175
1897	28,403,700	12,924,100	43,572,500	171
1898	25,233,650	12,387,300	42,546,900	167
1899	23,451,350	11,593,950	41,274,000	161
1900	25,051,300	11,460,650	40,856,850	160

A further description of the details of the operations of the Bank of Germany is not required in this place. A sufficient

* From 1876 to 1883 inclusive the gold coin held among "German Current Coin" is not stated separately.

† From 1894 to 1900 the amounts are separated.

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outline has been given for the purpose proposed—the comparison of the rate of discount ruling in Germany with that in the other countries referred to.

The following table shows what the development of the note circulation has been:—

TABLE 29.
Imperial Bank of Germany. Annual Averages of Note Circulation, 1876-1900.

Date.	Note Circulation Yearly Average.	Proportion of each Year to 1876. 1876 = 100.
1876	£34,243,314	100
1877	34,746,450	101
1878	31,132,084	91
1879	33,383,746	97
1880	36,750,642	107
1881	36,986,370	108
1882	37,348,901	109
1883	36,862,286	108
1884	36,645,303	107
1885	36,372,132	106
1886	40,108,900	117
1887	43,030,813	126
1888	46,652,116	136
1889	49,365,708	144
1890	49,194,085	144
1891	48,583,303	142
1892	49,236,812	144
1893	49,241,462	144
1894	50,019,195	146
1895	54,779,650	160
1896	54,174,850	158
1897	54,285,200	158
1898	56,229,700	164
1899	57,087,600	167
1900	56,928,050	166

There have been from the year 1881 onwards many occasions on which the note issue has exceeded the legal limit. The particulars are as follows:—

1881. THE DUTY ON THE EXCESS WAS £1,359, THE AMOUNT:—

Dec. 3. £1,304,608

1882. THE DUTY ON THE EXCESS WAS £1,637, THE AVERAGE £785,234,
THE AMOUNTS:—

Sept. 30 £961,205 Oct. 7 £609,262

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1884. THE DUTY ON THE EXCESS WAS £1,702, THE AMOUNT:—

Dec. 31 £1,633,935

1885. THE DUTY ON THE EXCESS WAS £137, THE AMOUNT:—

Jan. 7 £130,766

1886. THE DUTY ON THE EXCESS WAS £1,779, THE AMOUNT:—

Dec. 31 £1,708,067

1889. THE DUTY ON THE EXCESS WAS £11,799, THE AVERAGE, £3,775,462,
THE AMOUNTS:—Sept. 30 £3,591,210 | Dec. 31 £5,473,880
Oct. 7 2,261,2971890. THE DUTY ON THE EXCESS WAS £16,392, THE AVERAGE £2,709,022,
THE AMOUNTS:—Jan. 7 £2,519,965 | Oct. 7 £5,210,240 | Oct. 31 £946,546
Sept. 30 4,572,542 | Oct. 15 1,692,468 | Dec. 31 1,312,369

1893. THE DUTY ON THE EXCESS WAS £2,000, THE AMOUNT:—

Sept. 30 £1,925,885

1895. THE DUTY ON THE EXCESS WAS £11,203, THE AVERAGE, £3,583,667,
THE AMOUNTS:—

Sept. 30 £2,304,315 | Oct. 7 £1,035,495 | Dec. 31 £7,414,190

1896. THE DUTY ON THE EXCESS WAS £23,240, THE AVERAGE, £3,718,410,
THE AMOUNTS:—Jan. 7 £1,790,576 | June 30 £1,716,434 | Oct. 7 £3,917,639
March 31 2,200,411 | Sept. 30 5,977,928 | Dec. 31 6,707,4311897. THE DUTY ON THE EXCESS WAS £38,396, THE AVERAGE £4,095,551,
THE AMOUNTS:—Jan. 7 £1,564,556 | Sept. 30 £10,291,477 | Oct. 31 £1,951,201
March 31 609,477 | Oct. 7 8,551,835 | Nov. 7 354,184
June 30 1,409,857 | Oct. 15 3,513,282 | Dec. 31 8,614,0911898. THE DUTY ON THE EXCESS WAS £96,370, THE AVERAGE, £5,782,203,
THE AMOUNTS:—Jan. 7 £3,028,242 | Oct. 7 £12,092,673 | Nov. 15 £3,722,995
March 31 3,523,912 | Oct. 15 8,351,869 | Nov. 23 303,138
April 7 1,044,953 | Oct. 23 5,068,560 | Nov. 30 1,832,743
June 30 6,476,171 | Oct. 31 7,764,228 | Dec. 23 1,529,121
July 7 3,286,168 | Nov. 7 6,518,472 | Dec. 31 14,147,764
Sept. 30 13,824,846 |

1899. THE DUTY ON THE EXCESS WAS £142,365, THE AVERAGE, £6,833,500,
THE AMOUNTS:—

Jan. 7 . .	£7,354,812	Sept. 30 . .	£18,561,653	Nov. 23 . .	£2,619,674
Jan. 15 . .	1,704,157	Oct. 7 . .	14,180,528	Nov. 30 . .	4,460,641
March 31 . .	5,495,286	Oct. 15 . .	10,212,781	Dec. 7 . .	3,509,589
April 7 . .	2,631,028	Oct. 23 . .	6,255,572	Dec. 15 . .	2,518,603
June 30 . .	6,935,228	Oct. 31 . .	9,384,173	Dec. 23 . .	6,803,817
July 7 . .	4,764,663	Nov. 7 . .	7,313,353	Dec. 30 . .	16,880,799
Sept. 23 . .	26,489	Nov. 15 . .	5,059,260		

1900. THE DUTY ON THE EXCESS WAS £125,893, THE AVERAGE £6,042,847,
THE AMOUNTS:—

Jan. 7 . .	£10,451,808	July 7 . .	£2,052,405	Nov. 15 . .	£2,746,125
Jan. 15 . .	2,385,019	Sept. 30 . .	14,626,562	Nov. 30 . .	1,153,649
March 31 . .	11,912,966	Oct. 7 . .	12,439,982	Dec. 7 . .	110,585
April 7 . .	6,720,991	Oct. 15 . .	6,586,951	Dec. 15 . .	476,582
April 15 . .	2,110,761	Oct. 23 . .	3,348,976	Dec. 23 . .	3,605,412
April 30 . .	1,659,229	Oct. 31 . .	6,933,702	Dec. 31 . .	17,795,871
June 30 . .	7,932,165	Nov. 7 . .	5,807,101		

The total amount of duty paid to the Government during the twenty-five years (1876-1900) has been £474,272.

The tables marked 25 and 26, pp. 156 and 157, describe the variations in the rate of discount charged by the Bank of Germany, and the number of days at each rate. In one respect the figures contained in Table 26 differ from those of any of the other banks in the fact that at no time has a lower rate than 3 per cent. been charged. With the Banks of England, France, and Holland, rates from 2 to $2\frac{1}{2}$ per cent. have occurred, and with the Bank of Belgium $2\frac{1}{2}$ has not been infrequent. So low a rate as 3 per cent. was not charged by the Bank of Germany before 1879, and it did not become frequent till 1886, and the years between that date and 1898. The 2,640 days during which collectively it was charged by the Bank of Germany compare with—

11,341	at 3 per cent. and under by the Bank of England.	
10,163	"	France.
12,508	"	Holland.
10,623	"	Belgium.

4 per cent. has been the most usual rate charged by the Bank of Germany, that rate having been fixed for 11,077 days by it. The more extreme rates have been charged for comparatively short periods. Those above 5 per cent. lasted at the Bank of Germany for 1,988 days, as compared with 2,299 at the Bank

of England. And at the Bank of England 141 of those days were at 10 per cent., a rate charged by no other bank during the period with which we are concerned. The study of Table 27, p. 158, which gives the number of days at each rate, shows very clearly the measures which the Bank of Germany had to take in order to retain and augment the gold in its possession *

Tax on Excess Issues.

One of the propositions which has been made with the view of mitigating the fluctuations in the rate of interest charged by the Bank of England has been the adoption of an arrangement similar to that at present in use in Germany, through which the Reichsbank is allowed to exceed the authorised limit of its circulation, provided a definite proportion of specie to the actual issue is maintained, on payment of a tax of 5 per cent. (see p. 163). But it must be remembered that this expedient, although it allows a greater measure of freedom to the Reichsbank, does not add a single 20-mark piece to its store of specie. Hence this measure, although well adapted to the business requirements of Germany, does not appear equally suited to our own case. A somewhat similar plan for the modification of the Act of 1844 was brought forward by Lord Sherbrooke (Mr. Robert Lowe) in 1873, but the bill he introduced did not obtain sufficient support to secure acceptance from the House of Commons.† It was indeed hardly likely to do so, as it required the minimum rates for discounts and temporary advances to be not less than 12 per cent., and the foreign exchanges to be favourable to this country before "a special and temporary issue of Bank of England notes" on Government securities could be permitted. It may be mentioned in this place that the Bank of England paid to the Treasury out of the profits of the note issue for the year ended 31st March, 1902—the latest statement to hand—£194,880 3s. The Treasury thus shares in the profits of the issue. It is more likely to reap an advantage from this source when the rate charged for the privilege of "a special and temporary issue" is low, than when, as in the proposal made by Lord Sherbrooke, the rate is

* For further information respecting the Bank of Germany see *Bankers' Magazines* (August, 1902, and before).

† This bill is printed on pp. 93, 94.

of many forms of business in this country, not large individually, but of great importance collectively, have no idea of the injurious effect which high rates of interest produce on the prosperity of these industries, and how rapidly heavy charges exhaust all possible profits. This is especially the case when those engaged in them are people with capitals comparatively small in proportion to the industries which they carry on.



CHAPTER XVII

VARIATIONS IN THE RATE CHARGED BY THE BANK OF HOLLAND FROM 1844 TO 1900

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[The Florin converted as 12=£1.]

THE remarks on the variations of the rate of discount charged by the Bank of Holland will be best understood when preceded by a few remarks on its history, which will assist us to understand its position and the class of business it transacts.

During the second half of the last century many changes were made in the management of the Bank of Holland, the financial institution which has long exercised the leading influence over the monetary matters of that country. The existing bank was founded in 1814. Various plans, including the establishment of a Banking Office for the introduction of an issue of bank bills, date as far back as 1795, but twenty years elapsed before satisfactory arrangements could be made. At the present time the President and the Secretary are both appointed by the Crown. These officers are paid by the bank,

which owes much of its prosperity to the skill and ability exercised by Mr. C. W. Mees, President from about 1850 onwards, by his successor, Dr. N. G. Pierson, afterwards Finance Minister of Holland, and by Mr. N. P. Van Den Berg, formerly President of the Bank of Java, who took up and now carries on the work of Dr. Pierson. Besides the President and the Secretary there are four Directors, who are appointed by the general meeting of the shareholders with the agreement of the Commissioners. The Commissioners, who also share in the management, are appointed by a committee of fifty of the largest of the shareholders. It is their duty to examine the annual balance sheet, which they also sign, and their sanction is necessary for the amount of the dividends. They occupy in many respects much the same position as the "Censors" of the Banks of France and of Belgium. The president and directors are obliged to have their domicile in Amsterdam. Only Dutch citizens in the possession of full civic rights and holding not less than fifteen shares can be directors. The head office is in Amsterdam; the branch at Rotterdam corresponds closely to the branch of the Bank of Belgium at Antwerp in its relative importance to the bank. Nearly 10 per cent. of the total operations of the bank were transacted in Rotterdam in 1900-1, about 55 per cent. was done in the other agencies, and 35 per cent. in the head office. There are seventeen agencies at towns varying in importance from the Hague and Arnheim to much smaller places like Deventer and Meppel, one sub-agency, and seventy-two correspondents. The correspondents are divided into three classes. Discounts and loans on advances on security can be obtained at the branch bank, the agencies, and the sub-agency, and the correspondents of the first and second class, of which there are sixty-two. Remittances and the power of receiving short drafts by means of "assignations," that is, of drafts issued by the bank, are allowed between all the offices except those of the third class. A charge of 30 cents (say, sixpence), including the stamp duty payable to the Government of 21 cents (say, fourpence) on each transaction, irrespective of amount, has kept these transactions from being very numerous. The turnover in them was about £26,000,000 for the year 1900-1. Cheques are not

much used in Holland. The notes in circulation, short drafts and balances on deposit account at the bank, must be covered by coin and bullion to the extent of 40 per cent. Loans to a considerable extent are made by the bank on merchandise. The discount business, though much smaller than that in Belgium, is considerable. The law of August 7th, 1888, allowed the bank to buy bills payable abroad. This power has been used, though not to a very large extent. These bills are sold when the Foreign Exchanges become unfavourable to Holland, and when this occurs are as useful to the bank as the possession of gold. The loans, advances, and discounts on March 31st, 1902, were about £8,800,000, divided thus:—

Inland Bills	£3,500,000
Foreign Bills	940,000
Loans and Advances	4,400,000

The total discounts for the year 1900-1 were about £27,000,000.

The capital and reserve fund of the bank may be reckoned as £2,000,000. Like the Bank of Belgium, it keeps in touch with the business of the country through the operations at its numerous agencies and correspondents, and it watches the foreign exchanges in the interest of the country, which is sometimes exposed to considerable demands for specie. As a rule, the balance of trade is in favour of Holland, and bullion accordingly flows in freely. But occasionally the tide turns, as was the case in 1882, when a strong demand for export set in, and the bank's stock of gold, which about the middle of 1880 had amounted to 80,000,000 of guilders (£6,666,600, at 12' guilders = £1), decreased to below 5,000,000 guilders (£416,600).

To protect the general interests of the country against the serious dangers thus threatened, a bill was passed (Act of 27th April, 1884) empowering the Government, as soon as the state of the currency should render it necessary, to withdraw from circulation and to sell in the open market silver coin to the amount of 25,000,000 of guilders (£2,083,300, at 12' gs. = £1), and to buy gold with the proceeds. Up to the present time, however, "there has never been any need to put this measure

—which in the full sense of the term may be considered as the safety-valve of the present currency system of Holland—into force.” The existence of this power, which may be regarded as the equivalent of a “Treasury Letter” to the Bank of England in a crisis, has doubtless been of service to the Bank of Holland in difficult times, though the price of silver, and consequently the amount of gold bullion which could be purchased with 25,000,000 of guilders, is now (1902) less than half of what it was in 1884, the price of silver having been 4s. 2*d.* per oz. at the earlier, but only about 1s. 10*d.* at the later date. “The law of 1884 is the unequivocal acknowledgment of the principle that the State is responsible for the maintenance of the gold value of the silver currency, and that it is one of the first duties of every Government that has imposed a standard of value upon its subjects to take every reasonable precaution in its power to prevent that standard from fluctuating.”*

Holland is the only country in Europe which has recognised this duty. The Bank of Holland has, as distinctly as the Bank of France, endeavoured to keep an equable position both in ordinary times and in times of pressure. It is principally a bank of discount, and declines anything that is not exactly trade paper—even of the most respectable houses. It has been able to maintain on average since 1845 the lowest rate of discount of any of the five banks whose operations we are now describing. The variations in its rate do not much exceed in number those of the Bank of Germany, and the extent of those fluctuations has on the whole been moderate.

The number of changes in the rate of discount at the Bank of Holland has been 173, as against 161 at the Bank of Germany, 111 at the Bank of France, and 400 at the Bank of England, between 1844 and 1900.

	Days.	%
The number of days at the rate of 3 per cent. and below was	12,508	61
3½ to 5 per cent. inclusive the number was	7,184	35
5½ per cent. up to 7 per cent., the highest charged	878	4
In all	20,570	100

The merchant who required discounts would have obtained this accommodation on the whole at more reasonable terms

* See article by Dr. N. P. Van den Berg, “Exchange between Holland and Dutch India,” Palgrave’s *Dictionary of Political Economy*, vol. i. p. 773.

from the Bank of Holland than at any other of the great banks of Europe.

Similar tables to those prepared for the explanation of the transactions of the other banks are given for those of the Bank of Holland. Table 30 gives the monthly averages of the minimum rate, Table 31 gives the number of days at each rate, and of changes in each year, from 1844 to 1900.

TABLE 30.

Monthly Averages of Minimum Rate of Discount of Bank of Holland 1845-1900, in groups of Ten Years, 1845-54, 1855-64, 1865-74, 1875-84, 1885-94, and of Six Years, 1895-1900, with Summary Table, 1845-1900.

Month.	1845-54.		1855-64.		1865-74.		1875-84.	
	Average for the Ten Years, £2 18s. 4d. = 100.	Avg. of Ten Years = 100.	Average for the Ten Years, £3 16s. od. = 100.	Average of Ten Years = 100.	Average for the Ten Years, £3 17s. od. = 100.	Average of Ten Years = 100.	Average for the Ten Years, £3 8s. 2d. = 100.	Average of Ten Years = 100.
January	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
February	3 1 4	105	4 0 4	106	4 7 6	114	3 12 2	106
March	3 0 0	103	3 14 11	98	3 18 8	102	3 12 2	106
April	3 0 5	104	3 13 0	96	3 13 3	95	3 11 8	105
May	2 18 3	100	3 10 11	93	3 9 7	91	3 9 11	102
June	2 16 0	96	3 11 7	94	3 11 7	93	3 9 10	102
July	2 14 4	93	3 11 0	93	3 13 0	94	3 4 0	95
August	2 14 3	93	3 10 6	93	3 16 2	99	3 3 11	93
September	2 15 0	94	3 11 11	95	3 13 5	95	3 4 0	94
October	2 16 0	98	3 19 8	105	3 17 1	100	3 7 6	99
November	3 2 1	106	4 6 4	114	4 4 6	110	3 9 0	101
December	3 4 0	110	4 10 1	118	4 5 6	111	3 10 9	104
Difference: Highest and Lowest Month, 9% 9d.			Difference: Highest and Lowest Month, 19s. 7d.			Difference: Highest and Lowest Month, 17s. 2d.		
Mean of extreme Variations for 1845-54, 8·5%			Mean of extreme Variations for 1855-64, 12·5%			Mean of extreme Variations for 1865-74, 17·5%		

Month.	1885-94.		1895-1900.		1845-1900.			
	Average for the Ten Years, £2 14s. 4d. = 100.	Average of Ten Years = 100.	Average for the Six Years, £3 2s. 4d. = 100.	Average of Six Years = 100.	Average for the Fifty-six Years, £3 6s. 4d. = 100.	Average of Fifty-six Years = 100.		
January	£ s. d.		£ s. d.		£ s. d.			
February	2 17 2	105	3 2 9	101	3 10 9	106		
March	2 14 1	99	2 18 10	94	3 7 0	103		
April	2 13 0	97	3 0 0	96	3 5 7	99		
May	2 13 0	97	2 18 8	94	3 3 9	96		
June	2 13 6	98	2 18 4	93	3 4 7	97		
July	2 12 0	95	2 18 8	94	3 2 8	94		
August	2 12 0	95	3 30 1	102	3 2 11	95		
September	2 16 0	102	3 5 2	105	3 3 11	96		
October	2 16 6	103	3 6 2	106	3 7 4	101		
November	2 17 0	105	3 6 8	107	3 11 3	107		
December	2 17 5	106	3 6 8	102	3 12 9	110		
Difference: Highest and Lowest Month, 5s. 5d.			Difference: Highest and Lowest Month, 3s. 4d.			Difference: Highest and Lowest Month, 10s. 1d.		
Mean of extreme Variations for 1885-94, 5·5%			Mean of extreme Variations for 1895-1900, 7%			Mean of extreme Variations for 1845-1900, 8%		

BANK OF HOLLAND. RATE OF DISCOUNT.

TABLE 31.

Changes in the Rate of Discount charged by the Bank of Holland, and the Number of Days at each Rate in each Year, from September 5th, 1844, to December 31st, 1900.

Years	No. of Changes			2 %	2½ %	3 %	3½ %	4 %	4½ %	5 %	5½ %	6 %	6½ %	7 %	Total	Years	
	Rise	Fall	Total	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days		
1844	No	change		—	117	—	—	—	—	—	—	—	—	—	—	117	1844
1845	5	—	5	—	237	50	3	—	18	20	37	—	—	—	—	365	1845
1846	—	2	2	—	—	—	—	269	—	56	40	—	—	—	—	365	1846
1847	1	—	1	—	—	—	—	306	—	50	40	—	—	—	—	365	1847
1848	1	—	3	4	—	—	181	—	101	—	84	—	—	—	—	366	1848
1849	—	1	1	—	—	315	50	—	—	—	—	—	—	—	—	365	1849
1850	—	1	1	298	67	—	—	—	—	—	—	—	—	—	—	365	1850
1851	No	change	—	365	—	—	—	—	—	—	—	—	—	—	—	365	1851
1852	No	change	—	366	—	—	—	—	—	—	—	—	—	—	—	366	1852
1853	2	—	2	299	19	47	—	—	—	—	—	—	—	—	—	365	1853
1854	No	change	—	—	365	—	—	—	—	—	—	—	—	—	—	365	1854
1855	2	—	2	—	—	288	14	63	—	—	—	—	—	—	—	365	1855
1856	3	—	3	—	—	—	—	266	24	53	23	—	—	—	—	366	1856
1857	5	3	8	—	—	—	—	133	64	57	33	28	—	—	50	365	1857
1858	—	6	6	—	—	16	258	48	11	13	—	18	—	—	—	365	1858
1859	No	change	—	—	365	—	—	—	—	—	—	—	—	—	—	365	1859
1860	No	change	—	—	366	—	—	—	—	—	—	—	—	—	—	366	1860
1861	2	—	2	—	—	336	7	22	—	—	—	—	—	—	—	365	1861
1862	2	2	4	—	—	—	—	195	170	—	—	—	—	—	—	365	1862
1863	4	2	6	—	—	82	185	50	22	26	—	—	—	—	—	365	1863
1864	5	4	9	—	—	—	—	—	72	185	16	16	30	47	366	1864	
1865	6	5	11	—	—	113	84	58	26	22	18	44	—	—	365	1865	
1866	4	7	11	—	—	—	—	—	10	59	76	76	107	37	365	1866	
1867	2	4	6	—	126	114	89	33	3	—	—	—	—	—	—	365	1867
1868	—	2	2	—	281	53	32	—	—	—	—	—	—	—	—	366	1868
1869	5	—	5	—	110	23	133	19	23	57	—	—	—	—	365	1869	
1870	4	8	12	—	—	24	73	125	24	65	26	28	—	—	365	1870	
1871	—	2	2	—	—	208	111	46	—	—	—	—	—	—	—	365	1871
1872	5	1	6	—	111	165	14	20	8	48	—	—	—	—	—	366	1872
1873	4	5	9	—	—	—	—	—	83	29	217	7	16	13	—	365	1873
1874	—	3	3	—	—	—	—	317	14	17	17	—	—	—	—	365	1874
1875	—	1	1	—	—	128	237	—	—	—	—	—	—	—	—	365	1875
1876	No	change	—	—	366	—	—	—	—	—	—	—	—	—	—	366	1876
1877	No	change	—	—	365	—	—	—	—	—	—	—	—	—	—	365	1877
1878	2	—	2	—	—	122	160	83	—	—	—	—	—	—	—	365	1878
1879	—	2	2	—	—	217	112	36	—	—	—	—	—	—	—	365	1879
1880	No	change	—	—	366	—	—	—	—	—	—	—	—	—	—	366	1880
1881	3	—	3	—	—	280	6	48	31	—	—	—	—	—	—	365	1881
1882	4	4	8	—	—	—	81	30	83	153	18	—	—	—	—	365	1882
1883	—	4	5	—	—	206	32	32	34	20	73	—	—	—	—	365	1883
1884	—	1	1	—	—	231	135	—	—	—	—	—	—	—	—	366	1884
1885	—	1	1	—	216	149	—	—	—	—	—	—	—	—	—	365	1885
1886	No	change	—	—	365	—	—	—	—	—	—	—	—	—	—	365	1886
1887	No	change	—	—	365	—	—	—	—	—	—	—	—	—	—	365	1887
1888	No	change	—	—	366	—	—	—	—	—	—	—	—	—	—	366	1888
1889	No	change	—	—	365	—	—	—	—	—	—	—	—	—	—	365	1889
1890	4	—	4	—	291	24	7	2	41	—	—	—	—	—	—	365	1890
1891	—	3	3	—	—	324	13	7	21	—	—	—	—	—	—	365	1891
1892	—	1	1	—	221	145	—	—	—	—	—	—	—	—	—	366	1892
1893	4	—	6	—	136	83	30	32	—	84	—	—	—	—	—	365	1893
1894	—	2	2	—	312	44	9	—	—	—	—	—	—	—	—	365	1894
1895	No	change	—	—	365	—	—	—	—	—	—	—	—	—	—	365	1895
1896	2	—	2	—	—	57	32	77	—	—	—	—	—	—	—	366	1896
1897	—	1	1	—	—	266	99	—	—	—	—	—	—	—	—	365	1897
1898	—	1	1	—	123	242	—	—	—	—	—	—	—	—	—	365	1898
1899	4	—	4	—	172	13	15	77	88	—	—	—	—	—	—	365	1899
1900	—	3	3	—	—	328	8	13	76	—	—	—	—	—	—	365	1900
	86	87	173	1,328	4,737	6,443	3,030	2,104	651	1,399	367	226	150	135	20,570		

Table 32 gives the number of days at each Rate arranged from the highest number to the smallest, and also arranged from the lowest rate to the highest. For further remarks see Chapter XIX., p. 190, and Chapter XX., p. 203, which contain a general statement of the more important business fluctuations here considered.

TABLE 32.

Bank of Holland—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the highest number to the smallest.

Number of Days (20,570).	Rate Per Cent.	Number of Days=1,000.
6,443	3	313
4,737	2½	230
3,030	3½	147
2,104	4	102
1,399	5	68
1,328	2	65
651	4½	32
367	5½	18
226	6	11
150	6½	7
135	7	7
20,570		1,000

Bank of Holland—Rate of Discount—1844-1900. The Number of Days at each Rate, arranged from the lowest rate to the highest.

Rate Per Cent.	Number of Days (20,570).	Number of Days=1,000.
2	1,328	65
2½	4,737	230
3	6,443	313
3½	3,030	147
4	2,104	102
4½	651	32
5	1,399	68
5½	367	18
6	226	11
6½	150	7
7	135	7
20,570		1,000

CHAPTER XVII

VARIATIONS IN THE RATE CHARGED BY THE BANK OF BELGIUM FROM 1851 TO 1900

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[Amounts in Francs converted as 25 = £1.]

THE rate of discount charged by the Bank of Belgium has now to be examined. The government of this bank, which was founded by the Act of May 5, 1850,* is practically in the hands of the State, in a manner closely corresponding to that of the Banks of France, of Germany, and of Holland.

The Governor is appointed by the King, who may also suspend or discharge him. His salary, which is fixed by the King, is paid by the bank, and the bank also provides him with a residence, and furnishes it. The Governor presides at all councils and meetings, and sees to the enforcement of all

* Hence the year 1851 is the first complete year of its operations.

laws and regulations. It would be his duty to inform the Government of any act of the council which might be contrary to the statutes, or adverse to the State, should any such occur. He has general authority over all the agents of the bank, and must own fifty shares of 1,000 francs each (say £40) of the bank stock. The King also selects a deputy-governor from among the directors of the bank, who acts instead of the Governor when he is absent. The Directors, six in number, are chosen by the general assembly. They must be Belgian citizens, and reside in Brussels. Each director must own at least twenty-five shares, and cannot be on the administrative council of any other bank. Each director has the control of one department or more of the business of the bank, and has authority over the officers employed there. The Administrative Council meets three times a week. It also advises with the Censors, who, seven in number, are appointed by the general meeting of the shareholders. The Council of the Censors has control over all the transactions, audits the books, and votes the budget of expenses prepared by the Administrative Council. The Governor, Directors, and Censors constitute the General Council, which meets once a month, and keeps the position of the bank generally under consideration. It also selects a Discount Council, which examines the paper presented for discount, and determines what to accept or reject. The business is thus carefully safeguarded.

The Bank of Belgium differs from the Banks of England, France, and Germany, in the fact that it has, like the Bank of Holland, one preponderating branch—in the case of the Bank of Belgium, that at Antwerp—at which a very large proportion of the business of the bank is done. The bank has branches and discount offices in the principal cities of the provinces, and in those other places where the Government considers it advisable. The bank confines its operations to commercial paper, and does not discount bills drawn on a bank. It buys bills on foreign centres—as London, Paris, and Amsterdam. Including Brussels and Antwerp, there are forty-one offices in all; these include, places which are important business centres, like Charleroi, Ghent, Liège, and Verviers, and very small towns like Péruwelz and Wavre.

Discount offices, *Comptoirs d'Escompte*, are established wherever the interests of trade render this necessary. At these offices bills which conform to the requirements of the statutes of the bank are discounted. Each office is responsible for the paper in which it deals. Facilities for discount are given at most of the agencies of the bank. Discount offices are in some instances maintained in places which carry on their business through the medium of the post, corresponding in this with the *Villes rattachées* in connection with the Bank of France. Under these circumstances it may well be understood that the operations of the discount offices which are responsible for the paper they admit to discount are carefully conducted and watched.

The country discount offices of the Bank of Belgium are institutions so peculiar in character that a few words of explanation are advisable. They are private partnerships, *Sociétés en nom collectif*, "the title of the firms comprising the name of one or more of the partners, and the liability of each being unlimited." (See article on *Sociétés Commerciales* in Palgrave's *Dictionary of Political Economy*.) The members, or administrators, of these firms are approved by the bank. They are responsible for the due payment of the bills discounted by them. They do a large business. During the year 1901 they discounted collectively 1,968,897 bills for an amount of £44,205,960. The share of the discount, *Del Credere*, which the bank received for these was £173,235; the share which the offices received was £43,388.

Del Credere means in this reference an extra commission received by a broker who undertakes to become surety for the solvency of the customer for whom he transacts business.* During the year 1901 more business, as is not unusual, was done at the country discount offices than at the head office. This is shown by the details of the business in 1901:—

(Amounts in francs converted as 25 = £1 throughout this statement.)

The branches discounted	1,968,897 bills for £44,205,956
Antwerp discounted	243,118 " 15,976,649
Brussels discounted	1,657,972 " 41,874,454

See translation of the Report of the Bank of Belgium in the *Bankers' Magazine* for November, 1902.

In the total amount of discounts the operations

At the country offices represented	43 per cent.
Those at Antwerp	16 "
Those at Brussels	41 "

As the same rate of discount obtains at all the offices, the National Bank of Belgium is closely in touch with the business of the country. The regulations as to the note circulation direct that the bank shall maintain a stock of specie in hand equal to one-third of the combined amount of its bank note circulation and other obligations at sight; but the Minister of Finance may at his discretion set aside this obligation, and authorise the bank to work below the one-third limit. Thus the bank is practically free in respect of its issues, and in 1901 the specie and bullion held averaged £4,500,000, and the fiduciary note circulation £23,500,000.

With reference to the date to which this statement is carried in the case of the Bank of Belgium, as the bank was not established till the year 1851, while the operations of the other banks referred to in these pages go back to earlier dates, an exact comparison of the number of the changes in its rate with those of the other banks is not possible. For the period during which it has been at work, its fluctuations have corresponded very closely in number with those of the Bank of Holland; it has not been quite as free from changes as the Bank of France, but it compares well with the other banks in this respect, as well as in the moderation of the rates of discount charged.

While these moderate charges have been maintained, the reserve in specie of the Bank of Belgium has never been large in proportion to its operations. The current accounts were £3,600,000 to the credit December 31st, 1901, and the bills discounted were £19,100,000. With notes in circulation at the same date £26,000,000, the coin and bullion held stood at £4,600,000, less than one-fifth of the notes in the hands of the public. The bank has been enabled to carry on its operations with this comparatively small bullion reserve, through its skill in discounting, and through the power of regulating the foreign exchanges which it possesses by means of the quantity of foreign paper which it holds. In the

balance-sheet of December 31st, 1901 (p. 207), the bills discounted stood at £19,100,000; of this sum the foreign bills held amounted to £6,500,000. Through holding these drafts on other countries the council of the bank has the means of operating in any direction when the exchanges are unfavourable to Belgium. The moderate rates of discount charged and the comparatively small range of fluctuation show how carefully, especially of late years, the Bank of Belgium has maintained this power. Roughly speaking, one-fifth part of the bills it has dealt with during the last twenty years have been on foreign countries. A statement is likewise given of the average fiduciary note circulation—the amount of which has greatly increased, particularly during the last twenty years. The considering the manner in which these points have been managed and the low rate of discount which has been charged will enable us to appreciate the caution with which the Bank of Belgium has conducted its operations :—

TOTAL OPERATIONS IN DISCOUNTS.

Year.	On Belgium.	On Foreign Countries.	Total.
1851	£ 3,248,000	£ 4,192,000	£ 7,440,000
1860	29,176,000	1,120,000	30,296,000
1870	48,200,000	5,272,000	53,472,000
1880	65,880,000	13,904,000	79,784,000
1890	78,344,000	15,876,000	94,220,000
1900	109,988,000	27,728,000	137,716,000
1901	102,052,000	32,776,000	134,833,000

AVERAGE FIDUCIARY NOTE CIRCULATION.

Year.	£
1851	1,268,000
1860	4,472,000
1870	7,488,000
1880	12,544,000
1890	15,292,000
1900	23,060,000
1901	23,970,000

The rate of discount charged by the Bank of Belgium has generally been moderate, more than half—10,623 days out of the 18,262 days which have elapsed between 1851, the first complete year of the bank's operations, and 1900—having been at 2½ and 3 per cent.

The number of days at these rates, compared with the other banks under notice, is as follows:—

	No. of Days.		
Belgium	10,623 out of 18,262	. . . .	58 per cent. of total.
England	11,341 " 20,570	. . . .	55 " "
France	10,163 " "	. . . .	49 " "
Germany	2,640 " "	. . . .	12 " "
Holland	12,508 " "	. . . .	61 " "
		Days.	%
The number of days at the rate of 3 per cent. and below was	10,623	. .	58
3½ to 5 per cent. inclusive the number was	6,767	. .	37
5½ per cent. up to 7 per cent., the highest charged	872	. .	5
In all	18,262	. .	100

In one other point also the Bank of Belgium stands to advantage as compared with the other banks—this is in the small number of rates charged.

At the Bank of Belgium	9	rates have been charged, varying from 2½ to 7 %
At the Bank of Holland	11	" " " " 2 " 7 "
At the Bank of Germany	12	" " " " 3 " 9 "
At the Bank of France	14	" " " " 2 " 9 "
At the Bank of England	15	" " " " 2 " 10 "

The Bank of Belgium has thus kept its variations in rates within more moderate bounds than any of the other banks named, except the Bank of Holland, during the period under notice. This in the case of Belgium is somewhat shorter than in the case of the other banks.

Table 33, p. 187, which contains the monthly averages of the rate of discount charged, Table 34, p. 188, and Table 35, p. 189, which give the number of changes in the rate of discount charged by the Bank of Belgium, and the number of days at each rate in each year, and also the number of days at each rate taken collectively,—show very clearly the course of action taken by the bank.*

* For further information respecting the Bank of Belgium see *Bankers' Magazine* for August, 1901, and November, 1902.

CH. XVIII] MONTHLY AVERAGES, DISCOUNT RATE, BELGIUM 187

TABLE 33.

Monthly Averages of Minimum Rate of Discount of Bank of Belgium 1851-1900,
in groups of Four Years, 1851-54, and Ten Years, 1855-64, 1865-74, 1875-84,
1885-94, and of Six Years, 1895-1900, with Summary Table, 1851-1900.

Month.	1851-54.		1855-64.		1865-74.		1875-84.	
	Average for the Four Years, £3 7s.	Avg. of Four Years = 100.	Average for the Ten Years, £3 11s. 1d.	Average of Ten Years = 100.	Average for the Ten Years, £3 13s. 1d.	Average of Ten Years = 100.	Average for the Ten Years, £3 7s. 9d.	Average of Ten Years = 100.
January .	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
January .	3 10 0	104	3 14 2	103	3 12 6	98	3 12 8	107
February .	3 10 0	104	3 12 6	101	3 8 10	93	3 7 4	99
March .	3 10 0	104	3 10 1	98*	3 6 6	90	3 5 0	96
April .	3 10 0	104	3 6 9	93	3 9 10	95	3 4 8	96
May .	3 9 5	104	3 9 0	96	3 14 8	101	3 6 2	98
June .	3 5 0	97	3 8 10	96	3 14 10	101	3 1 4	90
July .	3 5 0	97	3 7 9	94	3 15 1	102	3 1 0	90
August .	3 5 0	97	3 7 1	93	3 15 7	102	3 2 9	92
September .	3 5 0	97	3 11 3	99	3 12 10	99	3 7 5	99
October .	3 5 0	97	3 14 9	104	3 17 10	105	3 11 6	106
November .	3 5 0	97	4 0 2	112	4 2 0	111	3 18 5	116
December .	3 5 0	97	3 19 11	111	3 17 2	103	3 14 2	110
Difference : Highest and Lowest Month, ss.	Difference : Highest and Lowest Month, 13s. 5d.		Difference : Highest and Lowest Month, 15s. 6d.		Difference : Highest and Lowest Month, 17s. 5d.		Difference : Highest and Lowest Month, 19s. 6d.	
Mean of extreme Variations for 1851-54, 3·3%	Mean of extreme Variations for 1855-64, 9·5%		Mean of extreme Variations for 1865-74, 10·5%		Mean of extreme Variations for 1875-84, 13%		Mean of extreme Variations for 1895-1900, 7·5%	

Month.	1885-94.		1895-1900.		1851-1900.	
	Average for the Ten Years, £3 1s. 1d.	Average of Ten Years = 100.	Average for the Six Years, £3 5s. 1d.	Average of Six Years = 100.	Average for the Fifty Years, £3 8s. 1d.	Average of Fifty Years = 100.
January .	£ s. d.		£ s. d.		£ s. d.	
January .	3 6 9	109	3 8 5	105	3 11 0	104
February .	3 2 0	101	3 4 1	99	3 7 4	99
March .	2 17 11	95	3 2 8	96	3 5 1	95
April .	2 17 0	93	3 1 10	95	3 4 8	95
May .	2 19 0	97	3 3 4	97	3 6 11	98
June .	2 18 0	95	3 4 4	99	3 5 7	96
July .	2 18 7	96	3 4 5	99	3 5 5	96
August .	2 19 0	97	3 3 4	97	3 5 8	97
September .	2 19 1	97	3 3 4	97	3 6 11	98
October .	3 2 9	103	3 6 10	103	3 10 7	104
November .	3 5 4	108	3 8 4	105	3 14 8	110
December .	3 6 10	109	3 9 10	107	3 13 3	108
Difference : Highest and Lowest Month, ss.	Difference : Highest and Lowest Month, 8s.		Difference : Highest and Lowest Month, 10s.		Difference : Highest and Lowest Month, 10s.	
Mean of extreme Variations for 1885-94, 8%	Mean of extreme Variations for 1895-1900, 6%		Mean of extreme Variations for 1851-1900, 7·5%		Mean of extreme Variations for 1851-1900, 7·5%	

BANK OF BELGIUM. RATE OF DISCOUNT.

TABLE 34.

Changes in the Rate of Discount charged by the Bank of Belgium, and the Number of Days at each Rate, in each Year, from January 1st, 1851, to December 31st, 1900.

Years.	Number of Changes.			2½%	3%	3½%	4%	4½%	5%	5½%	6%	7%	Total Days.	Years.
	Rise.	Fall.	Total.	Days.										
1851	No change			—	—	—	365	—	—	—	—	—	365	1851
1852	—	I	I	—	218	—	148	—	—	—	—	—	366	1852
1853	No change			—	395	—	—	—	—	—	—	—	365	1853
1854	No change			—	365	—	—	—	—	—	—	—	365	1854
1855	No change			—	365	—	—	—	—	—	—	—	365	1855
1856	I	—		—	271	—	95	—	—	—	—	—	366	1856
1857	2	2	4	—	—	209	77	9	5	65	—	—	365	1857
1858	—	4	4	—	283	40	26	14	2	—	—	—	365	1858
1859	I	1	2	—	298	—	67	—	—	—	—	—	365	1859
1860	I	I	2	—	282	—	84	—	—	—	—	—	366	1860
1861	3	—	5	—	101	—	234	—	30	—	—	—	365	1861
1862	I	2	3	—	300	—	65	—	—	—	—	—	365	1862
1863	3	—	3	—	241	—	65	—	12	47	—	—	365	1863
1864	2	4	6	—	—	37	—	67	47	215	—	—	366	1864
1865	3	3	6	—	56	76	153	—	36	—	44	—	365	1865
1866	2	4	6	—	114	—	82	—	99	—	70	—	365	1866
1867	—	I	I	30	335	—	—	—	—	—	—	—	365	1867
1868	No change			366	—	—	—	—	—	—	—	—	366	1868
1869	No change			365	—	—	—	—	—	—	—	—	365	1869
1870	2	3	5	196	—	84	—	18	21	24	22	—	365	1870
1871	5	6	11	5	8	67	226	8	21	30	—	—	365	1871
1872	6	3	9	101	—	108	51	—	69	37	—	—	366	1872
1873	8	8	16	—	—	23	57	71	59	64	64	27	365	1873
1874	3	6	9	—	—	70	114	101	39	—	41	—	365	1874
1875	3	6	9	—	114	22	122	107	—	—	—	—	365	1875
1876	—	2	2	253	77	36	—	—	—	—	—	—	366	1876
1877	I	I	2	309	—	56	—	—	—	—	—	—	365	1877
1878	2	1	3	180	—	111	31	43	—	—	—	—	365	1878
1879	I	3	4	133	112	102	18	—	—	—	—	—	365	1879
1880	I	I	2	—	147	219	—	—	—	—	—	—	366	1880
1881	4	3	7	—	—	197	40	63	7	58	—	—	365	1881
1882	4	6	10	—	—	40	108	163	37	—	17	—	365	1882
1883	—	I	I	—	—	324	41	—	—	—	—	—	365	1883
1884	I	I	2	—	229	75	62	—	—	—	—	—	366	1884
1885	I	3	4	—	266	26	73	—	—	—	—	—	365	1885
1886	2	4	6	—	221	109	25	10	—	—	—	—	365	1886
1887	—	—	2	131	63	171	—	—	—	—	—	—	365	1887
1888	2	2	6	124	126	40	11	—	65	—	—	—	366	1888
1889	I	3	4	—	163	70	92	28	12	—	—	—	365	1889
1890	—	2	2	—	291	19	55	—	—	—	—	—	365	1890
1891	No change			—	365	—	—	—	—	—	—	—	365	1891
1892	—	I	I	225	141	—	—	—	—	—	—	—	366	1892
1893	I	—	I	124	241	—	—	—	—	—	—	—	365	1893
1894	No change			—	365	—	—	—	—	—	—	—	365	1894
1895	—	I	I	290	75	—	—	—	—	—	—	—	365	1895
1896	I	—	I	116	250	—	—	—	—	—	—	—	366	1896
1897	No change			—	365	—	—	—	—	—	—	—	365	1897
1898	I	—	I	—	353	—	12	—	—	—	—	—	365	1898
1899	4	2	6	—	—	216	70	5	74	—	—	—	365	1899
1900	—	2	2	—	—	326	13	26	—	—	—	—	365	1900
	77	96	173	3,169	7,454	2,426	3,017	643	621	372	473	27	18,262	

CH. XVIII] NUMBER OF DAYS AT EACH RATE, BELGIUM 189

TABLE 35.

Bank of Belgium—Rate of Discount—1851-1900. The Number of Days at each Rate, arranged from the highest number to the smallest.

Number of Days (18,262).	Rate Per Cent.	Number of Days=1,000.
7,454	3	408
3,169	2½	174
3,017	4	165
2,426	3½	132
681	5	37
643	4½	35
473	6	26
372	5½	21
27	7	2
<hr/> 18,262		1,000

Bank of Belgium—Rate of Discount—1851-1900. The Number of Days at each Rate, arranged from the lowest rate to the highest.

Rate Per Cent.	Number of Days (18,262).	Number of Days=1,000
2½	3,169	174
3	7,454	408
3½	2,426	132
4	3,017	165
4½	643	35
5	681	37
5½	372	21
6	473	26
7	27	2
<hr/> 18,262		1,000

CHAPTER XIX

THE FLUCTUATIONS IN THE RATE OF THE BANK OF ENGLAND COMPARED WITH OTHER BUSINESS FLUCTUATIONS

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WE are now in a position to compare the fluctuations between the rates charged by the Bank of England and by the other great banks of Europe, and also the fluctuations in the proportions between the reserve and liabilities of the Bank, in the specie

held by the Issue Department, in its note circulation, in the English country note circulation, in the Scotch and Irish note circulation, and in the returns of the London Clearing House. The history of all these movements is contained in the tables in this volume, but for the convenience of readers who may find it laborious to grasp the meaning of the masses of figures which it has been necessary to employ, Table 36, pp. 192-3, is now added, containing a summary of the main tables which form the basis of this statement. References to the original table whence the information is taken, with its number and that of the page where it will be found, are given for the assistance of those who desire to study the subject completely. With each summary a column of proportional figures has been provided, showing the arithmetical mean of the extreme variations during each period.

This method has been employed because the differences are sometimes between rates of interest, such as those charged by the Bank of England and other banks, and sometimes between specific amounts, such as those of the reserve and liabilities, of the specie in the Issue Department, and of the note circulations analysed. The reader is thus assisted in making the comparisons he may desire to draw between each series of figures. The periods examined are the same throughout the whole series, being the decades from 1845 to 1894, the six years from 1895-1900, and the total period from 1845-1900. The only exceptions to this rule are, as has been pointed out before, the operations of the Bank of Belgium, which only date back to 1851, and those of the London Bankers' Clearing House, which only date from 1868. These, though not extending exactly over the same periods, are yet brought as far as possible into corresponding divisions for facility of reference.

The first point that will strike the reader is that the variations of the rate of discount at the Bank of England have been far more severe since the years 1845-1854 than at any other of the five banks quoted, whether these are examined into groups of decades or for the whole period. The column attached to each table showing the mean of the extreme variations during each period taken brings out the facts very clearly. The rate charged by the Bank of France has been the most uniform, but though the rates in Germany, Holland

TABLE 36.

Summary of Fluctuations, Rates of Discount, Banks of England, France, Germany, Department, Liabilities and Reserve, English Country Note Circulation, London

BANK OF ENGLAND RATE OF DISCOUNT (see Table 12, p. 97).			BANK OF ENGLAND NOTE CIRCULATION (see Table 6, p. 70).		
Years.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	
1845-1854	£ s. d. 9 5	% 7	£ 1,351,000	% 3·5	
1855-1864	1 1 7	11·5	1,562,000	4	
1865-1874	1 6 6	17·5	1,991,000	4	
1875-1884	1 3 8	18·5	1,509,000	2·5	
1885-1894	1 12 1	25	1,914,800	4	
1895-1900	1 6 1	21·5	2,127,000	4	
Total Period, 1845-1900	19 2	13·5	1,466,000	3	

BANK OF FRANCE RATE OF DISCOUNT (see Table 21, p. 142).			BANK OF GERMANY RATE OF DISCOUNT (see Table 25, p. 156).		BANK OF HOLLAND RATE OF DISCOUNT (see Table 30, p. 178).	
Years.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.
1845-1854	s. d. 4 0	% 2·5	£ s. d. 5 0	% 3	s. d. 9 9	% 8·5
1855-1864	19 5	10	13 2	7·5	19 7	12·5
1865-1874	10 1	6·5	14 3	8	17 11	11·5
1875-1884	11 0	9	18 8	11	8 3	6·5
1885-1894	4 0	3·5	17 8	12	5 5	5·5
1895-1900	5 11	6	1 10 0	18	6 4	7
Total Period, 1845-1900	8 2	5·5	13 3	8	10 1	8

SCOTCH NOTE CIRCULATION AND SPECIE HELD AGAINST IT
(see Table 15, pp. 118-120 and Table 17, pp. 124-131).

Years.	NOTE CIRCULATION.		SPECIE HELD AGAINST IT.	
	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.
1845-1854	£ 559,000	% 8·5	£ 198,000*	% 9
1855-1864	704,000	8·5	295,000	6·5
1865-1874	814,000	8·5	511,000	8
1875-1884	1,072,000	9·5	810,000	10
1885-1894	1,092,000	9	945,000	10·5
1895-1900	1,380,000	9·5	1,204,000	11
Total Period, 1845-1900.	839,000	8·5	568,000*	8·5

* From 1846 in the case of the Specie held.

TABLE 36 (*continued*).

Holland and Belgium, *Note Circulation Bank of England, Bullion in Issue Bankers' Clearing House Returns, Scotch and Irish Note Circulation, and Specie held.

BULLION IN THE ISSUE DEPARTMENT OF THE BANK OF ENGLAND (see Table 7, p. 71).		LIABILITIES OF THE BANK OF ENGLAND (see Table 11, pp. 82, 83).		RESERVE OF THE BANK OF ENGLAND (see Table 11, pp. 82, 83).		
Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Proportion of Reserve to Liabilities (see Table 11, p. 82).
£ 885,000	% 3'5	£ 3,109,000	% 9	£ 2,004,000	% 11	52
1,485,000	5'5	1,802,000	5	2,038,000	12	42
1,867,000	4'5	3,712,000	7	2,449,000	10'5	43
2,940,000	5'5	5,053,000	8	2,837,000	9'5	44
3,909,000	8'5	5,201,000	7'5	3,432,000	11	45
3,982,000	6	7,505,000	7	5,372,000	10'5	51
2,005,000	5	3,914,000	7	2,460,000	9	46

BANK OF BELGIUM RATE OF DISCOUNT (see Table 33, p. 187).		COUNTRY NOTE CIRCULATION OF ENGLAND (see Table 8, p. 75).		CLEARING HOUSE RETURNS (see Table 18, p. 133).		
Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Years.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.
s. d. 5 0*	% 3'5	£ 636,000	% 4'5	...	£ ...	% ...
13 5	9'5	583,000	5	...	...	...
15 6	10'5	549,000	5'5	1868-1874	102,112,000	13
17 5	13	443,000	5'5	1875-1884	115,386,000	12
9 10	8	262,000	5'5	1885-1894	95,489,000	8'5
8 0	6	240,000	8'5	1895-1900	113,815,000	8'5
10 0*	7'5	465,000	5	1868-1900	80,397,000	7'5

* From 1851.

IRISH NOTE CIRCULATION AND SPECIE HELD AGAINST IT
(see Table 16, pp. 121-3, and Table 17, pp. 124-131).

NOTE CIRCULATION.		SPECIE HELD AGAINST IT.	
Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.	Difference between the Highest Month and the Lowest Month.	Mean of the extreme Variations during each Period.
£ 999,000	% 9*	£ 262,000*	% 8
1,005,000	8	302,000	7
1,294,000	9'5	518,000	10 *
1,340,000	9'5	512,000	8'5
974,000	7'5	401,000	6'5
1,057,000	8	422,000	7
1,103,000	8'5	352,000*	7 *

From 1846 in the case of the Specie held.

and Belgium have not been so uniform as in France, none of these banks show anything like the same extremes of variation as are found in England. Nor are such fluctuations found in any other business movements in England of which we possess any indications as, for instance, in the proportions between the reserve and liabilities of the Bank or of the specie in the Issue Department.

The fluctuations in the London Bankers' Clearing House returns, which represent the amount of business passing from month to month, do not show any variations so extreme as those of the discount rate of the Bank of England, nor do the figures of the note circulation of the Bank of England, nor those of the English country note circulation, exhibit any similar movement. This last, though now greatly shrunken from the position it once held, yet reflected closely while it was more general than it became of recent years the requirements of English provincial business, and did this very distinctly when the note circulation extended more widely over the country. The returns of the Scotch and of the Irish note circulations show considerable fluctuations, but these also are not so extreme as the fluctuations in the rate charged by the Bank of England.

It should be added that these summary tables were brought together thus with the view of examining whether any correspondence of fluctuation might be found. The only place in which such a correspondence exists is in the fluctuations of the Scotch and Irish note circulations, which, through the operation of the Bank Acts of 1844-5, are brought to bear directly on the reserve of the Bank of England. The autumnal drain also must be remembered (see Chapter XIV., p. 138).

It is well to mention here that these tables were originally drawn up in much greater detail, principally in annual, some in monthly averages. In this shape, while the information contained in them was very instructive, they were so cumbrous that publication was not advisable. The comparison has therefore been shown between the fluctuations in the decades into which the various tables are divided because this was the most convenient method of placing the information before the reader in a succinct form. These tables show that the fluctuations in the rate charged by the Bank of England have been far

greater, more rapid, and more extreme than at any other bank in Europe.

To make this point perfectly clear Tables 37, p. 196, 38, p. 197, and 39, p. 198, have been prepared. Table 37 shows the number of variations in the rate of discount charged by all the five banks in each year from 1844 to 1900; Table 38 the lowest and highest rates and the extent of fluctuation; and Table 39 the number and extent of annual fluctuations in the rate—grouped together so as to show the extent of the fluctuations—and the number of years in which these fluctuations occurred. This last-mentioned table provides an interesting compendium of the number and extent of the fluctuations. These are arranged in order from the lowest rate of fluctuation to the highest. From it we learn that at no bank but the Bank of England were there during three separate years fluctuations so large as of $5\frac{1}{2}$, 6, and $6\frac{1}{2}$ per cent. With the exception of the Bank of Germany, and this only during one twelvemonth, no bank, except the Bank of England, has shown fluctuations of more than 4 per cent. and 5 per cent. in one year. In the majority of years the fluctuations at the other banks did not exceed 1 or 2 per cent. Hence, while the range of fluctuation at the other banks has been low, it has been high at the Bank of England.

There can be no doubt that to the borrower, and every man in business practically must at times be a borrower, this high range of fluctuation has been a very serious disadvantage.

In a statement like the present it is impossible to put before the reader more than the merest outline of the subject. No doubt the commercial position of England—the vast foreign trade of the country as shown by the enormous amounts of the exports and imports (see Table 44, p. 213)—the manner in which London is the clearing house of the world—all expose the London money market to sharper and more sudden demands for specie than any other business centre. The demands for specie are most closely connected with the rate of discount. The point for us to consider should be: Is our system arranged on the best plan to meet these demands? Our method of keeping all the banking reserves of the country with one bank enables a great economy to be practised in our specie reserve;

FLUCTUATIONS IN THE RATE

TABLE 37.

Number of Variations in Rates of Discount, Banks of England, France, Germany, Holland (1844-1900), and Belgium (1851-1900).

Years.	Bank of England. No. of Variations in Rate.	Bank of France. No. of Variations in Rate.	Bank of Germany. No. of Variations in Rate.	Bank of Holland. No. of Variations in Rate.	Bank of Belgium. No. of Variations in Rate.*	Years.
1844	4	No change	1	No change	—	1844
1845	2	No change	2	5	—	1845
1846	1	No change	2	2	—	1846
1847	9	2	1	1	—	1847
1848	3	No change	2	4	—	1848
1849	1	No change	1	1	—	1849
1850	1	No change	No change	1	—	1850
1851	No change	No change	No change	No change	No change	1851
1852	2	1	1	No change	1	1852
1853	6	1	1	2	No change	1853
1854	2	2	1	No change	No change	1854
1855	8	2	1	2	No change	1855
1856	7	2	4	3	1	1856
1857	9	8	6	8	4	1857
1858	6	4	5	6	4	1858
1859	5	2	2	No change	2	1859
1860	11	1	No change	No change	2	1860
1861	11	7	No change	2	5	1861
1862	5	4	No change	4	3	1862
1863	12	8	1	6	3	1863
1864	15	11	4	9	6	1864
1865	16	6	5	11	6	1865
1866	14	7	8	11	1	1866
1867	3	2	No change	6	No change	1867
1868	2	No change	No change	2	No change	1868
1869	7	No change	1	5	5	1869
1870	10	4	5	12	11	1870
1871	10	2	2	2	2	1871
1872	14	1	1	6	9	1872
1873	24	4	7	9	16	1873
1874	13	2	4	3	9	1874
1875	12	No change	5	1	9	1875
1876	5	1	6	No change	2	1876
1877	7	1	7	No change	2	1877
1878	10	1	3	2	3	1878
1879	5	2	5	2	4	1879
1880	2	2	5	No change	2	1880
1881	6	2	3	3	7	1881
1882	6	3	4	8	10	1882
1883	6	1	1	5	1	1883
1884	7	No change	No change	1	2	1884
1885	7	No change	3	1	4	1885
1886	7	No change	5	No change	6	1886
1887	7	No change	2	No change	2	1887
1888	9	4	2	No change	6	1888
1889	8	2	4	No change	4	1889
1890	11	No change	3	4	2	1890
1891	10	No change	4	3	No change	1891
1892	4	1	2	1	1	1892
1893	12	No change	3	6	1	1893
1894	2	No change	2	2	No change	1894
1895	No change	1	1	No change	1	1895
1896	3	No change	3	2	No change	1896
1897	6	No change	5	1	1	1897
1898	6	1	6	1	1	1898
1899	6	2	7	4	6	1899
1900	6	4	3	3	2	1900
Total Variations	400	111	161	173	173	

* Excluding variations in very small amounts.

TABLE 38.

Lowest and Highest Rates charged and Extent of Fluctuation during each year, Banks of England, France, Germany, Holland (1844-1900), and Belgium (1851-1900).

Year.	BANK OF ENGLAND.			BANK OF FRANCE.			BANK OF GERMANY.			BANK OF HOLLAND.			BANK OF BELGIUM.			Year.		
	Lowest Rate.	Highest Rate.	Fluctuation.	Lowest Rate.	Highest Rate.	Fluctuation.	Lowest Rate.	Highest Rate.	Fluctuation.	Lowest Rate.	Highest Rate.	Fluctuation.	Lowest Rate.	Highest Rate.	Fluctuation.			
1844	No change			No change	4%	4½%	½%	No change			—	—	—	—	—	—	1844	
1845	2½%	3½%	1%	No change	4	5	1	2½%	5½%	3%	—	—	—	—	—	—	1845	
1846	3	3½	½	No change	4	5	1	4	6½	1½	—	—	—	—	—	—	1846	
1847	3	8	5	4%	5%	1%	4½	5	1	4	5	1	Operations commenced 1851.	—	—	1847		
1848	3	5	2	No change	4½	5	½	3	5	2	—	—	—	—	—	—	1848	
1849	2½	3	½	No change	4	4½	½	2½	3	½	—	—	—	—	—	—	1849	
1850	2½	3	½	No change	2	2	—	No change			No change		No change	—	—	—	1850	
1851	No change			No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	1851		
1852	2	2½	½	3	4	1	No change	No change	No change	2	3	1	3%	4%	1%	1852		
1853	2	5	•	3	4	1	4	5	1	No change	No change	No change	No change	No change	No change	1853		
1854	5	5½	½	4	5	1	4	5	1	No change	No change	No change	No change	No change	No change	1854		
1855	3½	7	3½	4	6	2	4	4½	½	3	4	1	No change	No change	No change	1855		
1856	4½	7	2½	5	6	1	4	6	2	4	5½	1½	3	4	1	1856		
1857	5½	10	4½	5	9	4	5	7½	2½	4	7	3	3½	5	2	1857		
1858	2½	8	5½	3	5	2	4	6½	2½	3	7	4½	3	4	1	1858		
1859	2½	4½	2	3	4	1	4	5	1	No change	No change	No change	3	4	1	1859		
1860	2½	6	3½	3½	4½	1	No change	No change	No change	2	3	1	No change	No change	No change	1860		
1861	3	8	5	4½	7	2½	No change	No change	No change	3	4	1	3	5	2*	1861		
1862	2	3	1	3½	5	½	No change	No change	No change	3½	4	½	3	4	1	1862		
1863	3	8	5	3½	7	3½	4	4½	½	3	5	2	3	5½	2½	1863		
1864	6	9	3	4½	8	3½	4½	7	2½	4½	7	2½	4	6	2	1864		
1865	3	7	4	3	5	2	4	7	3	3	6	3	3	6	3	1865		
1866	3½	10	6½	3	5	2	4	9	5	4½	7	2½	3	6	3	1866		
1867	2	3½	1½	2½	3	½	No change	No change	No change	2½	3½	1	No change	No change	No change	1867		
1868	2	3	1	No change	No change	No change	4	5	1	2½	3½	1	No change	No change	No change	1868		
1869	2½	4½	2	No change	4	5	1	2½	5	2½	2½	3	2½	6	3½	1869		
1870	2½	6	3½	2½	6	3½	4	8	4	3	6	3	2½	5½	3	1870		
1871	2	5	3	5	6	1	4	5	1	3	4	1	2½	5½	3	1871		
1872	3	7	4	5	6	1	4	5	1	2½	5	2½	2½	5½	3	1872		
1873	3	9	6	5	7	2	4	6	2	4	6½	2½	3½	7	3½	1873		
1874	2½	6	3½	4	5	1	4	6	2	3½	5	1½	3½	6	2½	1874		
1875	2	6	4	No change	4	6	2	3	3½	½	3	4½	1½	2½	3½	1	1875	
1876	2	5	3	3	4	1	3½	6	2½	No change	No change	No change	2½	3½	1	1876		
1877	2	5	3	2	3	1	4	5½	½	No change	No change	No change	2½	3½	1	1877		
1878	2	6	4	2	3	1	4	5	½	3	4	1	2½	4½	2	1878		
1879	2	5	3	2	3	1	3	4½	½	3	4	1	2½	4	1½	1879		
1880	2½	3	3	2½	3½	1	4	5½	½	No change	No change	No change	3	3½	2½	1880		
1881	2½	5	2½	3½	3½	1½	4	5½	½	3½	4½	1	3½	5½	2½	1881		
1882	2½	6	3	3½	5	1½	4	6	2	3½	5½	2	3½	6	2½	1882		
1883	3	5	2	3	3½	½	4	5	1	3½	5½	2	3½	4	1½	1883		
1884	2	5	3	No change	No change	No change	3	5	1	3½	5½	½	3	4	1	1884		
1885	2	5	3	No change	4	5	1	2½	3	No change	3	4	1	2½	3½	1	1885	
1886	2	5	3	No change	3	5	2	No change		2½	3½	1	2½	4	1½	1886		
1887	2	5	3	No change	3	5	2	No change		2½	5	2½	2½	5½	2½	1887		
1888	2	5	3	2½	4½	2	3	4½	½	No change	No change	No change	3	5	2	1888		
1889	2½	6	3½	3	4	1	3	5	2	No change	No change	No change	3	4	1	1889		
1890	3	6	8	No change	4	5½	½	2½	4½	2	No change	No change	No change	3	4	1	1890	
1891	2½	5	2½	No change	3	5½	2½	3	4½	1½	No change	No change	No change	2½	3	1½	1891	
1892	2	3½	1½	2½	3	½	3	4	1	2½	3	½	2½	3	1½	1892		
1893	2½	5	2½	No change	3	5	½	2½	5	2½	1	No change	No change	No change	2½	3	1½	1893
1894	2	3	1	No change	3	5	2	2½	5	2½	1	No change	No change	No change	2½	3	1½	1894
1895	No change	2	2½	2	3	1	3	4	1	No change	2½	3	2½	3	2	1	1895	
1896	2	4	2	No change	3	5	2	2½	3½	1	No change	2½	3	2	1	1	1896	
1897	2	4	2	No change	3	5	2	3	3½	½	No change	No change	No change	2	3	1	1897	
1898	2½	4	1½	2	3	1	3	6	2	3	3	2	3	4	1	1898		
1899	3	6	8	3	4½	1½	4	7	2	3	5	2	3½	5	1½	1899		
1900	3	6	3	3	4½	1½	5	7	2	3½	5	1½	4	5	1½	1900		

TABLE 39.

Number and extent of Annual Fluctuations in Rate at the Banks of England, France, Germany, Holland (1844-1900), and Belgium (1851-1900) during each year, grouped together so as to show the extent of the fluctuations and the number of years in which these fluctuations occurred.

Extent of Annual Fluctuations %	Bank of England. Number of Years.	Bank of France. Number of Years.*	Bank of Germany. Number of Years.	Bank of Holland. Number of Years.	Bank of Belgium. Number of Years.*
$\frac{1}{2}$	6	4	6	9	7
1	4	17	13	11	13
$1\frac{1}{2}$	3	5	6	5	4
2	6	6	13	6	7
$2\frac{1}{2}$	4	1	5	7	4
3	15	—	3	4	2
$3\frac{1}{2}$	5	3	—	—	—
4	4	1	1	1	—
$4\frac{1}{2}$	1	—	—	—	—
5	3	—	1	—	—
$5\frac{1}{2}$	1	—	—	—	—
6	1	—	—	—	—
$6\frac{1}{2}$	1	—	—	—	—
Total . . .	54	37	48	43	41
Years in which no change occurred .	3	20	9	14	9
Years . . .	57	57	57	57	50

* Bank of Belgium commenced 1851.

but on this one bank also all the demands connected with the note circulation of the country concentrate—both in England, Ireland, and Scotland—besides all the demands for the internal circulation of specie, of which an example is shown in the statement of the autumnal drain on the Bank of England for the twenty years 1881-1900 (Chapter XIV., p. 138), and all the demands for specie for export. These demands all fall on a reserve arranged as directed by the Act of 1844, which divides the resources of the Bank artificially into two parts, and causes the demand to fall on the smaller of them. The Act also has altered the composition of the reserve through increasing since 1844 the amount of the note circulation allowed to be issued against securities. See Chapter XXI., pp. 221-224.

The division of the Issue Department and the Banking Department, although, no doubt, it has advantages, by directing immediate attention to the amount of free resources which the Bank has at its disposal, nevertheless tends to render the

amount actually available to meet any sudden demand smaller than it would be if this artificial arrangement were not followed. Then while at times the regulations of the Act of 1844—which direct the Bank to buy standard gold up to any amount at a fixed price, whether needed for banking requirements or not—compel it to allow its reserve to be replenished at the will of the casual importer of gold—not of the responsible authorities of the Bank—thereby causing at times an unneeded accumulation, from which a low bank rate ensues, while at other times such an accumulation is followed by an opposite movement, and a tightness in the money market, both these movements being unconnected with the natural requirements of trade. All these matters are not without influence on the constant fluctuations in the rate. Table 7, p. 71, which contains a statement of the movements of the gold bullion in the Issue Department of the Bank, gives an outline of these transactions. An examination of this table, together with Table 11, pp. 82, 83, which compares the fluctuations in the liabilities and in the reserve, will be instructive, as will also be the comparison of the fluctuations in the rate of discount, the note circulation, the bullion, the liabilities, and the reserve shown in Table 36, pp. 192, 193. But search where we may in the accounts of the Bank, the fluctuations in the rate of discount exceed in severity all the other fluctuations which are recorded there.

In considering the extent of these fluctuations something must be ascribed to the deficiency of fluidity in the assets of the Bank. That the securities held are all of the most dependable description there can be no doubt, but it is believed that the greater part by far are fixed securities. Little is now known as to the amount of bills discounted and of short loans, from which sources immediate supplies of ready cash can be obtained, hence this part of the subject can only be spoken of in very general terms. The general opinion is that the short loans are only occasionally of any important amount—that the amount of bills discounted now is but small. The traditions handed down from the patriarchs of the discount market respecting the amount of bills held by the Bank thirty or forty years ago, and their vivid description of the very considerable

influence which the Bank of England once exercised over that market, to which there is nothing corresponding now, joined to the statement published by the Bank down to the year 1875 (see Table 3, cols. 30, 31, and 32, p. 14), lead to the impression that the Bank can now hold only a very small part of its assets in securities of this description. As is well known, if the Bank of England desires to "take money off the market" quickly it can only do this by working on its Consols. It does not hold any large amount of bills, which maturing rapidly would place it in possession of resources in cash without disturbing the outside market, nor has it any very large amount of short loans which it can draw in. Hence the action of the Bank must always be severe, though its action in protecting the reserve is most necessary.

If the balance-sheet of the Bank of England is compared with the balance-sheets of the other banks cited, the difference of their position will be seen, both in regard to the fluidity of their resources and also to the amount of bills they hold in foreign centres.

In order to enable the reader to make this comparison, the balance-sheet of the Bank of England for February 6th, 1902, has been given, both as it stands in the weekly returns and as it would appear if arranged as the balance-sheets of the other great issuing banks are. This will be found in Table 40, pp. 206, 207, with the balance-sheets of the Banks of France, Germany, Holland and Belgium for facility of comparison.

The first point that strikes the reader is the enormous capital of the Bank of England—more than £18,000,000, including the rest or undivided profits. This amount compares with a capital of £9,000,000, including profits in addition, at the Bank of France, and of £9,700,000, including reserve, at the Bank of Germany. This amount is to be raised to £12,000,000 by the law of 1899. The capital and reserve of the Bank of Holland are about £2,000,000, and of the Bank of Belgium about £3,000,000.

In respect of the amount of capital which it possesses the Bank of England has a great advantage over the other banks. When we proceed to the specie and bullion held the results are different. At the nearest convenient dates to that mentioned

above—the dates will be found given in Table 40, pp. 206, 207—the holding in specie of the Bank of England was £36,000,000, including perhaps £1,000,000 in silver; of the Bank of France, £143,000,000, including £44,000,000 in silver; at the Bank of Germany, £43,000,000, including £12,000,000 in silver and divisional money; at the Bank of Holland, £11,450,000; and at the Bank of Belgium, £4,600,000. The amounts are given in round figures in all cases. In the deposits there are great differences. Including public deposits, there were at the Bank of England £51,000,000; at the Bank of France, £39,000,000; at the Bank of Germany, £28,500,000; at the Bank of Holland, £400,000; and at the Bank of Belgium, £3,600,000. The differences between the amounts of notes in circulation issued by the banks are as considerable as those in the deposits. The notes in the hands of the public were: At the Bank of England, £29,000,000; at the Bank of France, £163,000,000; at the Bank of Germany, £74,000,000; at the Bank of Holland, £18,500,000; at the Bank of Belgium, £26,000,000.

The great difference, however, between the banks is in the composition of the securities held. The amount, shown in Table 40, pp. 206, 207, was £62,000,000 at the Bank of England. Few particulars are known, except that a large amount is held in fixed securities, and it is best not to attempt conjecture. The Bank of France held £55,000,000. Of this over £31,000,000 was in bills, all at short dates, and about £24,000,000 in advances on securities, all equally for short periods. At the Bank of Germany, out of £64,000,000, about £50,000,000 was in bills, none at long dates, including £2,100,000 on England and £8,000,000 in advances on securities, all also for short periods. About £6,200,000 was invested in securities. At the Bank of Holland, out of £10,000,000, about £4,400,000 was in bills, more than £900,000 of these being on foreign countries. £4,000,000 was in loans, also at short dates. At the Bank of Belgium, out of about £28,000,000, more than £19,000,000 was in bills, £6,500,000 of these on foreign countries. £5,000,000 was in advances on government securities and other advances at short dates, and about £2,000,000 in investments of a fixed

character, including those held for the reserve fund. This rough analysis shows in what different forms of securities the amounts held by the different banks are invested. The largest holder of fixed securities is the Bank of England; all the other banks hold their funds in a more readily available form.

The large amount of specie held, the ready preparation made to meet any emergency, are among the causes which enable the great banks of the Continent to avoid the constant changes and the violent fluctuations in the rate which occur in England. The placing the balance-sheets together thus enables the reader to examine the facts for himself, in the same way as the statements in Table 36, pp. 192, 193, enable him to compare the fluctuations in the rate of discount charged by these banks during the period over which this investigation extends.



CHAPTER XX

SOME REMARKS ON THE RATE OF DISCOUNT OF THE BANKS OF ENGLAND, FRANCE, GERMANY, HOLLAND, AND BELGIUM

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A REVIEW of some of the more important points of similarity and contrast in the operations and the rate of discount of the Banks of England, France, Germany, Holland, and Belgium will not be out of place here.

In one respect there is a difference between the rate charged at the Bank of Germany and those charged at the other banks between the years 1844 and 1900, and that is in the minimum rate of discount charged. The Bank of England, the Bank of France, and the Bank of Holland lowered their

rates not infrequently to 2 per cent. in the course of those years. The rate of the Bank of Belgium dropped for a considerable time to $2\frac{1}{2}$ per cent., but the Bank of Germany has never charged less than 3 per cent. During the period under review the rates from 2 to $2\frac{1}{2}$ per cent. at the Bank of England were as below:—

BANK OF ENGLAND, 1844 TO 1900.				Days.
2 per cent. for	.	.	.	3,409
$2\frac{1}{2}$	"	.	.	28
$2\frac{1}{2}$	"	.	.	2,997
				6,434

That is to say, for nearly one-third of the whole time the charges were at these low rates. The average rate charged by the Bank of France has been fractionally lower than that charged by the Bank of England, and it has charged less than 3 per cent. for a considerable period. The rates below 3 per cent. in the time under our notice were as follows:—

BANK OF FRANCE, 1844 TO 1900.				Days.
2 per cent. for	.	.	.	2,027
$2\frac{1}{2}$	"	.	.	2,579
				4,606

Thus, in France extremely low rates only prevailed for about two-thirds of the time that they did in England. Still in France the time during which rates of 2 and $2\frac{1}{2}$ per cent. lasted was more than one-fifth of the whole, a far from unimportant fraction. The corresponding figures in Holland are as follows:—

BANK OF HOLLAND, 1844 TO 1900.				Days.
2 per cent. for	.	.	.	1,328
$2\frac{1}{2}$	"	.	.	4,737
				6,065

This approaches very nearly to the number of days at similar rates in England. In Belgium 2 per cent. has never been charged; $2\frac{1}{2}$ is the lowest rate quoted by that Bank.

BANK OF BELGIUM, 1851 TO 1900.				Days.
$2\frac{1}{2}$ per cent. for	.	.	.	3,169

About half the length of time of low rates in England or in Holland.

While, however, extremely low rates have thus prevailed for a considerable time in England, and for a long period, though not equally long, in France, Holland, and Belgium, the rate at Berlin never dropped to 3 per cent. till 21st March, 1879, and was at $3\frac{1}{2}$ per cent. for 178 days only during the years under our notice.

The number of days at the rates of 3 and $3\frac{1}{2}$ per cent., which we may call intermediate rates, was as follows for all the five banks:—

BANK OF ENGLAND, 1844 TO 1900.					Days.
3 per cent. for	.	.	.	.	4,907
$3\frac{1}{2}$	"	.	.	.	<u>1,739</u>
					6,646
BANK OF FRANCE, 1844 TO 1900.					Days.
3 per cent. for	.	.	.	.	5,557
$3\frac{1}{2}$	"	.	.	.	<u>1,815</u>
					7,372
BANK OF GERMANY, 1844 TO 1900.					Days.
3 per cent. for	.	.	.	.	2,640
$3\frac{1}{2}$	"	.	.	.	<u>178</u>
					2,818
BANK OF HOLLAND, 1844 TO 1900.					Days.
3 per cent. for	.	.	.	.	6,443
$3\frac{1}{2}$	"	.	.	.	<u>3,030</u>
					9,473
BANK OF BELGIUM, 1851 TO 1900.					Days.
3 per cent. for	.	.	.	.	7,454
$3\frac{1}{2}$	"	.	.	.	<u>2,426</u>
					9,880

Taking the length of time that rates up to $3\frac{1}{2}$ prevailed, the figures are as follows:—

	Days.	Per cent. of whole Period.*
Bank of England	13,080	64
Bank of France	11,978	58
Bank of Germany	2,818	14
Bank of Holland	15,538	75
Bank of Belgium	13,049	72

The greatest number of days recorded at one rate is that when the rate stood at 4 per cent. at Berlin.

* The whole period is 20,570 days for the Banks of England, France, Germany, and Holland; 18,262 days for the Bank of Belgium.

TABLE 40.

Balance Sheets of the Banks of England, France, Germany, Holland,
and Belgium.

BANK OF ENGLAND.—ISSUE DEPARTMENT.

LIABILITIES.	£	ASSETS.	£
Notes Issued	51,899,605	Government Debt	11,015,100
		Other Securities	6,759,900
		Gold Coin and Bullion	34,124,605
	<u>£51,899,605</u>		<u>£51,899,605</u>

BANKING DEPARTMENT.

LIABILITIES.	£	ASSETS.	£
Proprietors' Capital	14,553,000	Government Securities	17,274,486
Rest	3,561,102	Other Securities	27,295,812
Public Deposits*	12,338,295	Notes	22,939,995
Other Deposits	39,051,746	Gold and Silver Coin	2,243,869
Seven-days and other Bills	250,019		
	<u>£69,754,162</u>		<u>£69,754,162</u>

* Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

Dated February 6th, 1902.—

JOHN G. NAIRNE, Chief Cashier.

BANK OF FRANCE—Balance Sheet, December 31st, 1901.

Francs converted as 25 = £1.

LIABILITIES.	£	ASSETS.	£
Capital of the Bank	7,300,000	Coin and Bullion at Paris and at the Branches	142,621,904
Reserve and Profits in addition to Capital	1,700,622	Amount of Bills—	
Notes payable to bearer in circulation (head office and branches)	162,888,252	Paris	£12,101,855
Drafts	1,039,749	Branches	19,620,233
Current Account with Treasury	8,098,797	Advances on Bullion, Money, and Securities—	
Current Accounts and Deposit Accounts—		Paris	£11,861,298
Paris	£28,894,315	Branches	11,891,898
Branches	2,581,153		<u>23,753,196</u>
	<u>31,475,468</u>	Advances to Government (laws of June 9, 1857, June 13, 1878, November 17, 1897)	7,200,000
Dividends unpaid, etc., etc.	2,626,634	Government Stock (Reserve Fund)	519,230
		Disposable Funds, Government Stock	3,985,092
		Immovable Funds, Government Stock (law of June 9, 1857)	1,000,000
		Amount appropriated to Special Reserve	336,297
		Office and furniture of the Bank and buildings at the Branches, etc.	991,715
	<u>£215,129,522</u>		<u>£215,129,522</u>

BANK OF HOLLAND—Balance Sheet, March 31st, 1902.

Gilders converted as 12 = £1.

LIABILITIES.	£	ASSETS.	£
Capital	1,666,667	Coin, Bullion, etc.	11,457,222
Reserve	444,311	Inland Bills	3,521,660
Notes in circulation	18,502,638	Foreign Bills	940,114
Transfers	126,766	Loan Accounts	3,846,765
Current Accounts	380,068	Advances on Current Accounts	544,288
Discount on Inland Bills	12,518	Investments—Capital	775,379
", " Foreign Bills	1,542	", Res. ave	62,666
Sundry liabilities	85,205	Sundry Assets, Buildings, etc.	145,615
Net Profit for distribution	74,194		
	<u>£21,293,709</u>		<u>£21,293,709</u>

NOTE.—All *per contra* entries, as those of the notes of the Banks held by themselves, &c., are omitted so as to show the real position of the accounts.

CH. XX] BALANCE SHEETS OF THE FIVE BANKS COMPARED 207

TABLE 40 (continued).

BANK OF ENGLAND—Balance Sheet, February 6th, 1902.

Arranged so that it corresponds in form with the Balance Sheets of the other Banks given here.

LIABILITIES.		ASSETS.	
Capital and Rest	£ 18,114,102	Gold Coin and Bullion and Silver	£ 36,368,474
Notes in Circulation	28,959,610	Coin	36,368,474
Seven-days and other Bills	250,019	Government Securities in both	
Public Deposits	12,338,295	Departments	35,049,486
Other Deposits	39,051,746	Other Securities	27,295,812
	£ 98,713,772		£ 98,713,772

IMPERIAL BANK OF GERMANY—Balance Sheet, December 31st, 1901.

Marks converted as 20 = £1.

LIABILITIES.		ASSETS.	
Capital and Reserve	£ 9,731,962	Gold in Bars	£ 9,776,608
Notes in circulation	74,085,220	German Gold Coin	21,832,532
Amount due on Clearing and Current Accounts	28,525,014		31,609,230
Deposits (not bearing Interest)	37,638	Silver, Thalers	6,911,620
Sundry Liabilities and Reserve for Doubtful Debts	556,389	Divisional Money	4,905,790
Net profits for 1900	827,875		11,817,410
			43,428,640
		Notes of Imperial Treasury (Reichskassenscheinen)	900,281
		Notes of other Banks	540,130
		Bills held, due within fifteen days	16,637,085
		Bills held, due at later dates	31,128,690
			47,765,775
		Bills drawn on England	£ 2,171,987
		Bills drawn on other foreign places	26,088
			2,198,075
			49,963,850
		Loans	8,071,878
		Securities	6,181,266
		Value of Real Property belonging to the Bank	1,863,360
		Sundry Assets	2,816,693
			£ 113,764,098

NATIONAL BANK OF BELGIUM—Balance Sheet, December 31st, 1901.

Francs converted as 25 = £1.

LIABILITIES.		ASSETS.	
Capital paid-up	2,000,000	Specie and Bullion	£ 4,646,127
Reserve Fund	1,144,698	Bills discounted	19,131,747
Notes in circulation	25,973,213	Securities due for Collection	2,840,784
Current Account	3,580,553	Advances on Government Securities	2,210,826*
Stamp Duty, Share of Profits due to the Government, Employes' Superannuation, Provident Funds, Dividend due, etc.	607,354	Government and Reserve Fund	
	£ 33,305,812	Securities	3,121,480
		Securities for Current Accounts, etc.	1,354,854
			£ 33,305,818

NOTE.—All *per contra* entries, as those of the notes of the Banks held by themselves, etc., are omitted so as to show the real position of the accounts.

The particulars are as follows:—

BANK OF ENGLAND, 1844 TO 1900.					Days.
4 per cent. for	.	.	.	.	2,698
4½ " "	.	.	.	.	481
5 " "	.	.	.	.	<u>2,012</u>
					5,191

BANK OF FRANCE, 1844 TO 1900.					Days.
4 per cent. for	.	.	.	.	4,516
4½ " "	.	.	.	.	353
5 " "	.	.	.	.	<u>2,061</u>
					6,930

BANK OF GERMANY, 1844 TO 1900.					Days.
4 per cent. for	.	.	.	.	11,077
4½ " "	.	.	.	.	1,439
5 " "	.	.	.	.	<u>3,648</u>
					16,164

BANK OF HOLLAND, 1844 TO 1900.					Days.
4 per cent. for	.	.	.	.	2,104
4½ " "	.	.	.	.	651
5 " "	.	.	.	.	<u>1,399</u>
					4,154

BANK OF BELGIUM, 1851 TO 1900.					Days.
4 per cent. for	.	.	.	.	3,017
4½ " "	.	.	.	.	643
5 " "	.	.	.	.	681
					4,341

To make this point thoroughly clear, a summary statement, marked Table 41, p. 209, is added, showing the number of days at each rate, arranged from the lowest rate charged to the highest, for each of the five banks.

It appears from this table that comparatively high rates were charged for the longest time in Germany; the next longest in France; the next longest in England; the next longest in Belgium; and for the shortest time in Holland. But if the rate never fell below 3½ per cent. in Berlin between 1844 and 1875, it never rose above 9 per cent., and indeed stood at that high point for sixty-three days only during the period under consideration, that is for a very inconsiderable fraction of the whole time. The average of the rate, however charged

in Berlin has been higher than at London or Paris, in Holland or in Belgium. The figures are—

	£ s. d.
England (1845-1900)	3 12 0
France (")	3 11 9
Germany (")	4 5 1
Holland (")	3 6 4
Belgium (1851-1900)	3 8 1

Shown in averages of ten years the statement Table 42, p. 210, points out that on average, from 1875 onwards, the rate of discount has been lower for the last five-and-twenty years in Paris than in London.

For the remaining variations, in the rate readers should look to Table 36, pp. 192, 193, in which all the variations of the rate at each of the five banks are summarised, to all the other tables there referred to, and to Table 45, p. 216.

There have been at Berlin as well as at Paris, in Holland, and in Belgium some years in which the rate of discount never varied at all, and there have been two years, though only two, at the Bank of England in which a similar occurrence took place, see Table 43, p. 211.

TABLE 41.

Rate of Discount, Banks of England, France, Germany, and Holland, 1844-1900, and Belgium, 1851-1900. The Number of Days at each Rate, arranged from the Lowest Rate to the Highest, and the Proportion per *mille* at each Rate.

	Bank of England.		Bank of France.		Bank of Germany.		Bank of Holland.		Bank of Belgium.*	
Rate per Cent.	Number of Days, 20,570.	Number of Days = 1,000	Number of Days, 20,570.	Number of Days = 1,000	Number of Days, 20,570.	Number of Days = 1,000	Number of Days, 20,570.	Number of Days = 1,000	Number of Days, 18,262.	Number of Days = 1,000
2	3,409	166	2,027	98	...	...	1,328	65	...	...
2½	28	...	...	...	...	...	...	...	...	...
2½	2,997	146	2,579	126	...	...	4,737	230	3,169	174
3	4,907	239	5,557	270	2,640	129	6,443	313	7,454	408
3½	1,739	84	1,815	.88	178	9	3,030	147	2,426	132
4	2,608	131	4,516	221	11,077	540	2,104	102	3,017	165
4½	481	23	353	17	1,439	70	651	32	643	35
5	2,612	98	2,701	100	3,648	177	1,399	68	681	37
5½	259	13	120	6	430	21	367	18	377	21
6	868	43	1,170	57	730	35	226	11	473	26
6½	91	4	8	...	50	2	150	7	...	...
7	577	28	286	14	234	11	135	7	23	2
7½	...	21	1	44	2	...	...	...	...	...
8	268	13	91	2	37	1	...	...	...	...
9	95	5	16	...	63	3	...	...	...	...
10	141	47	..	...	...	...	...	...	...	...
	20,570	1,000	20,570	1,000	20,570	1,000	20,570	1,000	18,262	1,000

* From 1851 to 1900.

It will be observed from Table 43, p. 211, that there was one year alone in which all the five banks coincided in making no alteration in the rate charged, and that was in 1851. It is an entirely fortuitous coincidence that in the period under consideration—Bank of Belgium, 1851-1900 (see p. 188); Bank of Holland, 1845-1900 (see p. 179)—the number of changes has been the same—173 at both banks. It will assist us in understanding the variations in the rate to compare the number of fluctuations at the different banks during the last ten years under notice.

NUMBER OF VARIATIONS IN THE RATES OF DISCOUNT, 1891 TO 1900.

	Bank of England.	Bank of France.	Bank of Germany.	Bank of Holland.	Bank of Belgium.*
1891 to 1900	55	9	36	23	13
Total amount of varia-	400	111	116	173	173
tions from 1844 to 1900					

* 1851 to 1900.

The rate charged by the Bank of France has remained almost uniformly low during the last ten years.

This tendency to greater variations in intensity, and to a greater number of fluctuations, must be expected to increase as commerce extends, and as business transactions in different countries not only become more numerous, but more closely connected. As is well known, the amount of foreign money employed in the London money market has increased greatly

TABLE 42.

Average Minimum Rate of Discount charged by the Banks of England, France, Germany, and Holland for the years 1845-1900, and Belgium for the years 1851-1900, showing Average for the groups of ten years 1845-54 (Belgium, 1851-54), 1855-64, 1865-74, 1875-84, 1885-94, and for six years 1895-1900, and for the whole period, 1845-1900 (Belgium, 1851-1900).

Years.	BANK OF ENGLAND.	Proportion of each group to total period £3 12s. 4d. = 100.	BANK OF FRANCE.	Proportion of each group to total period £3 11s. 9d. = 100.	BANK OF GERMANY.	Proportion of each group to total period £4 5s. 4d. = 100.	BANK OF HOLLAND.	Proportion of each group to total period £4 5s. 4d. = 100.	BANK OF BELGIUM.	Proportion of each group to total period £3 6s. 4d. = 100.	Proportion of each group to total period £3 8s. 4d. = 100.
1845-54	3 8 5	95	3 19 5	111	4 6 5	102	2 18 4	88	3 7 0	98	
1855-64	4 12 9	129	4 14 10	132	4 9 0	105	3 10 0	115	3 11 11	106	
1865-74	3 16 1	106	3 18 11	103	4 12 2	108	3 17 0	116	3 13 11	109	
1875-84	3 3 11	89	3 2 1	87	4 5 1	100	3 8 2	103	3 7 9	100	
1885-94	3 3 2	88	2 17 9	81	3 13 1	86	3 14 3	83	3 1 1	90	
1895-1900	3 0 4	84	2 8 8	68	1 4 2	99	3 2 4	97	3 5 6	96	
1845-1900	3 12 0	700	3 11 9	100	4 5 1	100	3 6 4	106	2 8 1	100	

TABLE 43.

Years in which no change took place in the Rate of Discount at the Banks of England, France, Germany, Holland (1845-1900), and Belgium (1851-1900).

BANK OF ENGLAND.	BANK OF FRANCE.	BANK OF GERMANY.	BANK OF HOLLAND.	BANK OF BELGIUM.
Years.	Years.	Years.	Years.	Years. (1851-1900.)
—	1844	—	1844	—
—	1845	—	—	—
—	1846	—	—	—
—	1848	—	—	—
—	1849	—	—	—
—	1850	1850	—	—
1851	1851	1851	1851	1851
—	—	1852	1852	—
—	—	—	—	1853
—	—	—	1854	1854
—	—	—	—	1855
—	—	—	1859	—
—	—	1860	1860	—
—	—	1861	—	—
—	—	1862	—	—
—	—	1867	—	—
—	1868	1868	—	1868
—	1869	—	—	1869
—	1875	—	—	—
—	—	—	1876	—
—	—	—	1877	—
—	—	—	1880	—
—	1884	1884	—	—
—	1885	—	—	—
—	1886	—	1886	—
—	1887	—	1887	—
—	—	—	1888	—
—	—	—	1889	—
—	1890	—	—	—
—	1891	—	—	1891
—	1893	—	—	—
—	1894	—	—	1894
1895	—	—	1895	—
—	1896	—	—	—
—	1897	—	—	1897
—	—	—	—	—
2*	2*	9*	4*	9*
55†	37†	48†	43†	41†
In all	57	57	57	50

* Years in which no alteration took place. † Years of change.

during recent years. When the London rate is lower than that ruling on the Continent, there is, of course, less inducement for English bills to be held in foreign countries. Hitherto, though an enormous amount of English capital has been sent abroad to almost every country in the world, it has been directed to fixed and permanent investments rather than to employment in bills drawn on business houses in foreign commercial centres. The bonds of foreign governments, of foreign railways, investments in industrial undertakings of almost every class, have all been largely supported by English capital. There is no need to make any detailed explanation of this point, as the fact is so well known. But while the bonds of many foreign governments are perfectly familiar here, the English banker or bill-broker has, as a rule, little knowledge of, or experience in, transactions in foreign bills. Hence, there are very few, if it almost might be said there are hardly any, foreign bills held in England; while the reverse of this is the case on the money markets of the Continent of Europe, where English bills are very generally held, and form a most useful reserve to those who hold them in the case of demands arising from an adverse rate of exchange.

These bills can be forwarded to this country for collection in case their holders want the money, or the amount represented may be reinvested in fresh bills as the holders desire it. No securities can be more convenient to the holders. It has been the feeling of confidence that first-class English bills would always be paid in gold which has given them their position.

In some instances the amounts in bills payable out of the country in which they are held are specified in the accounts of the banks whose statements are analysed here. In the case of the Bank of Germany the particulars of the countries on which they are drawn are given. The Bank of Belgium gives full particulars as to the amounts, but does not specify the countries. The bonds of foreign governments may be said to hold much the same place in England for these purposes that commercial bills on England do abroad, and often serve the purpose of making a remittance. When this occurs it tends to check a demand for gold for export which would probably

otherwise have arisen. The holding of these bonds in this country is, thus a service to us by preventing a drain on our bullion reserves, which might have been very inconvenient. But it must be remembered that the current may equally, when circumstances favour it, turn in the other direction. When the value of money rises on the principal money markets of Europe, or there is any great uncertainty about the prospects of foreign politics, a very considerable drain on our bullion reserve may at any time be made through the means of the English commercial and Treasury bills held so largely abroad.

In connection with this subject attention has repeatedly been drawn to the fact that our exports of recent years have not increased proportionately to our imports. As the point is of importance, I have added a table marked 44 (see below), giving the amounts of these for each ten years from 1861 to 1900. This should be read in connection with Table 19, p. 137, which compares the Clearing House returns with the exports and imports and the amounts of the note circulation between the years 1861 and 1900.

In col. 1 of Table 44, the gross amount of imports is stated, and in col. 2 the re-exports of foreign and colonial produce. Deducting these from the amount in col. 1, the net imports are shown in col. 3. The British and Irish exports are shown in col. 5, and the excess of imports over exports in col. 7. Three columns of proportional figures, Nos. 4, 6, 8, enable the reader to see at a glance what the progress of events has been. The exports, the figures of which mark a growth from 100 to 233,

TABLE 44.
Foreign Trade of the United Kingdom, 1861-1900 (totals at intervals of ten years).

Year.	Imports.	Re-exports of Foreign and Colonial Produce.	Net Imports.	Proportion of Net Imports to 1861 = 100.	British and Irish Exports.	Proportion of Exports to 1861 = 100.	Excess of Imports over Exports.	Proportion of Excess of Imports over Exports to 1861 = 100.
1861	£ 217,500,000	£ 34,500,000	£ 183,000,000	100	£ 125,100,000	100	£ 57,900,000	100
1871	331,000,000	60,500,000	270,500,000	148	223,100,000	178	47,400,000	82
1881	397,000,000	61,100,000	335,900,000	182	234,000,000	187	99,900,000	172
1891	435,000,000	61,000,000	373,500,000	204	247,200,000	207	126,300,000	218
1900	523,075,000	63,182,000	459,893,000	251	291,192,000	233	168,701,000	291

* Including ships, new (not registered as British).

have not increased so much as the net imports have done. These have moved from 100 to 251, and the excess of imports over exports has increased more rapidly still, having moved from 100 to 291. In the last year under notice, 1900, the excess of imports amounted to the enormous figure of £168,700,000, even after including ships sold to foreign owners, which are brought in among the exports in 1900, but do not appear in the statement for 1891 or in any of the earlier figures. There are many deductions to be made from this amount before we can understand what the figures really mean. These deductions arise from the large sums due for freight and other charges on the goods moved, forming part of the "invisible exports," with which phrase we have been made familiar. It is sometimes estimated that there should be annually due to this country some £90,000,000 for freights, and about £30,000,000 for other charges. I mention these figures and estimates merely to indicate that there is a very large deduction to be made from the enormous and increasing excess of imports over exports, which to the minds of many thoughtful persons appears such an alarming feature in our trade. The figures themselves may mislead the reader unless he remembers the circumstances. The imports are charged at their value on arrival here, thus including necessarily the cost of their freight to this country, while the exports represent their value here, not the price at which it is expected they will be sold, or the cost of their freight to their destination. That there must be some substantial set-off of this description is obvious, as otherwise the business of the country could never have gone on if we really imported goods to a value so much in excess of what we had to offer in exchange. Still, after making all possible allowances of this description, it is clear that this great and increasing amount of imports may readily be a danger both to our commercial position and our banking system by turning the course of the foreign exchanges against us, and perhaps with a rapidity unexpected by most people. At such times the sale of "international securities," as they are termed, that is to say, of bonds and other securities readily salable on the principal Stock Exchanges of the world, is as useful as an export of specie to meet a foreign demand. In the opinion

of men entitled to judge, this process has been going on for some time among us. It is even quite possible that the country may have been living "above its income" for some time past without this having been discovered. Though eventually the fact must become known, yet the process might go on for a long time till returning prosperity set the balance straight. The amount of "international securities" held in this country is said recently to have diminished considerably, while side by side with this there is believed to have been considerable investment of foreign money in British securities. Should this movement come to an end, or be reversed, it is obvious how great a demand may arise on our gold reserves. We cannot, of course, complain if foreign investors desire to possess securities which we hold, and are willing to purchase them on terms that suit us, but their doing this undoubtedly strengthens their power in our money market.

As the communication between the money markets of this country and of the rest of Europe becomes closer, we must expect, unless care is taken to obviate their occurrence, to see greater fluctuations in our own market. And the conclusion is obvious, that we are bound to take every precaution not only as to care in the details of business, but also by the formation and maintenance of a large bullion reserve in this country to enable us to meet the sudden demands which may, at any moment, be made on us. We reap a great advantage from the fact that our money market is the point where so many monetary transactions are carried on. We reap great advantages also from the fact that this country is so largely the Clearing House of the World; but unless our position in the matter of the specie reserve is a strong one, we shall be sure one day or another to find that the circumstances just referred to expose our business transactions to a great peril. We have attained our present position by unremitting exertion: the same exertion must be continued if we desire to maintain it.

The evidence of increasing closeness of connection between the principal money markets of Europe, which is given by the tables of variation in the rates of discount charged in them, has led to these remarks. We must be content to keep a larger

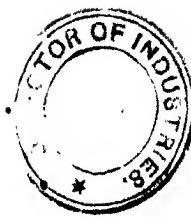
supply of "unused money" ready to meet the demands which may be made at any moment, if we desire to see a greater uniformity in the rate of discount charged here, and a diminution of those fluctuations which have of recent years caused so much inconvenience to our traders, and which are disadvantageous to the business interests of this country. A full supply of loanable capital at moderate and fairly uniform charges is at least as important to the trader as a full supply at reasonable prices of the goods he deals in, or of the raw materials he uses in his manufactures. A comparative statement of the rates of discount month by month at the five great banks of Europe, with the corresponding movements in the London Clearing House, Table 45, during the periods over which this investigation extends, is added below for facility of reference.

TABLE 45.

Average Monthly Discount Rate with proportion of each month to Average Annual Rate, 1845-1900, at Banks of England, France, Germany, and Holland, Belgium fifty years, 1851-1900, and of Monthly Average to Yearly Average at London Bankers' Clearing House thirty-three years, 1868-1900.

Month.	BANK OF ENGLAND (See Table 12) Average of Fifty-six Years, £3 12s.	Average of Fifty-six Years = 100.	BANK OF FRANCE (See Table 21) Average of Fifty-six Years, £3 12s. id.	Average of Fifty-six Years = 100.	BANK OF GERMANY (See Table 20) Average of Fifty-six Years, £4 5s. id.	Average of Fifty-six Years = 100.	Month.
Jan.	3 19 1	110	3 15 10	106	4 10 0	106	Jan.
Feb.	3 11 3	99	3 14 4	104	4 2 7	97	Feb.
March.	3 9 0	96	3 12 6	101	4 0 1	94	March
April.	3 6 10	93	3 9 10	98	3 19 11	94	April
May.	3 11 0	99	3 10 3	93	4 1 6	96	May
June.	3 6 7	92	3 8 1	95	4 1 3	96	June
July.	3 4 6	89	3 8 2	95	4 2 0	97	July
August.	3 6 4	92	3 8 7	96	4 1 10	96	August
Sept.	3 6 7	92	3 8 11	96	4 4 8	100	Sept.
Oct.	3 17 3	108	3 13 5	103	4 11 4	107	Oct.
Nov.	4 3 8	116	3 16 3	106	4 12 7	109	Nov.
Dec.	4 1 10	113	3 15 5	105	4 13 2	110	Dec.

Month.	BANK OF HOLLAND (See Table 30) Average of Fifty-six Years, £3 6s. 4d.	Average of Fifty-six Years = 100.	BANK OF BELGIUM (See Table 33) Average of Fifty Years, £3 6s. id.	Average of Fifty Years = 100.	LONDON CLEARING HOUSE (See Table 18) Average of Thirty-three Years, £514,991,000	Average of Thirty-three Years = 100.	Month.
Jan.	3 10 9	106	3 11 0	104	546,216,000	106	Jan.
Feb.	3 7 0	103	3 7 4	99	495,728,000	96	Feb.
March.	3 5 7	99	3 5 1	95	547,944,000	106	March
April.	3 3 9	96	3 4 8	95	501,657,000	97	April
May.	3 4 7	97	3 6 11	98	524,876,000	102	May
June.	3 2 8	94	3 5 2	96	494,897,000	96	June
July.	3 2 11	95	3 5 5	96	547,234,000	106	July
August.	3 3 11	96	3 5 8	97	502,296,000	97	August
Sept.	3 4 0	95	3 6 11	98	466,837,000	91	Sept.
Oct.	3 7 4	101	3 10 7	104	534,521,000	104	Oct.
Nov.	3 11 3	107	3 14 8	110	503,457,000	98	Nov.
Dec.	3 12 9	110	3 13 3	108	515,129,000	100	Dec.



CHAPTER XXI.

CONCLUSION

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THERE are several other points in the statements referred to and contained in this volume which may be indicated, though they cannot be followed out further. For instance, it was found, so long as the facts were made public, that the amount of the bankers' balances with the Bank of England on the second return in each half-year—that is to say, the second return in the months of January and July—was considerably above the total average of each year, and that there was a very marked augmentation in these amounts during the later compared with the earlier years, included in the returns. Similar though smaller fluctuations were observable at the corresponding dates in April and October. These periodic fluctuations are connected with the payments of the dividends on the funds, and on

other fixed securities. The increase in them is due to larger amounts of stock held as reserves by the banks of the country generally, and also to larger amounts of dividends received on account of customers. It must be borne in mind that the years from 1844 to 1900 have witnessed a very large development indeed in the business of banking in the United Kingdom. Many persons have accounts with a bank now who—or their predecessors in similar positions in life—would not have had banking accounts at an earlier period. The increase on the dates mentioned connects itself no doubt with this alteration in the habits of the country, and is interesting on that account.

This point is mentioned, among others, which a careful investigation of the returns relating to the Bank of England, and tabulated in this volume, will enable the reader to trace. Many matters connected with the conduct of business, many incidents in the transactions of the day which have influenced the adoption of a particular rate on a given occasion, cannot be recorded in the returns from which the figures in this statement have been condensed. Thus no indication can be traced in these returns of the habit said to be indulged in by some banks of accumulating a large balance at the Bank of England at the end of the half-year in order to make the half-yearly balance-sheet look better than it otherwise would do. This is a despicable practice, which should be discouraged by the common sense of all bankers.

Only a bare outline can be shown here of events, all-important to the well-being of the country; but it is hoped that this analysis will be of service in assisting us to thread the history of the past, and in enabling us to see what is needed at the present time.

One of the subjects which was proposed to be investigated in preparing this statement was the relation of the reserve to the current rate of interest charged. A study of this analysis shows the truth of the usual conclusion that the rate of discount charged by the Bank of England is regulated more by the proportion of the reserve to liabilities than by any other consideration. That the amount of the bankers' balances, and the proportion they bear to the reserve, may have a bearing on the rate is very probable, though the influence of this is not

clearly marked, and cannot now be traced owing to the absence of information in the published returns. The movements of the foreign exchanges, quoted for the great European centres of business—Paris, Amsterdam, Hamburg, Frankfort, and, we must now add, Berlin, as representative of Germany— influence the bank rate very greatly, because an unfavourable exchange is accompanied by an outflow of bullion, and hence by an immediate diminution of the reserve. It is well known that the Directors of the Bank, when fixing the rate to be charged, take the state of the foreign exchanges into consideration. The Bank possesses still, though other powerful banking institutions have grown up round it, and appear at first sight to overpower it, so strong an influence over our money market that by setting the rate of discount high enough it can always control the foreign exchanges, although this effect is not now produced so rapidly as in former years; hence the foreign exchanges generally appear to follow, rather than to lead, the Bank of England rate of discount. All these varied requirements—of discounts at home, of specie for export—of every other demand, affect the proportion of the reserve to the liabilities—the cardinal point on which the rate of interest charged by the Bank turns, influenced at times, besides the regular requirements of business, by the demands made on the stock of bullion held by the Bank through the movements of the Scotch and Irish note circulations and the autumnal drain.

Within the period over which this investigation extends, the amount of money in the country generally has enormously increased. The gold in circulation is nearly three times the amount it was some fifty or sixty years ago. Yet, while the amount of deposits held by the banks of the country—that is to say, the amount of loanable capital—has also greatly increased, we have far more frequent and rapid variations in the bank rate of interest, and often also a high rate.

The explanation of this is that no precautions are taken in this country as at the Banks of Germany, Belgium, and elsewhere to mitigate the pressure of an unfavourable exchange by holding bills on other countries, which can be "netted" when the need arises; while the total amount held in reserve has not

been increased in a like proportion with the demands which may be made on the reserve. Meanwhile, from the altered character of that reserve, which results from the enormous increase in the bankers' balances held by the Bank of England, there is a greater liability to sudden demands, owing to the vast increase in banking deposits throughout the world. In the United Kingdom alone they have increased fully fourfold during the last fifty years.

Mr. Newmarch estimated these deposits in 1851 at 260 millions; to which might at that time be added for foreign and colonial banks 25 millions, forming an aggregate of something like 300 millions. My own estimate of the holdings of the banks in the United Kingdom alone at the present time is that they approach, if they do not exceed, 1,000 or 1,100 millions.*

This very great increase in the amounts held on deposit during the last fifty years may at any moment give occasion for a very considerable demand on the banking reserve. The reserve held by the Bank itself is now smaller in proportion to its own liabilities than it was in the earlier years over which this survey extends. Meanwhile, no preparation whatever has been made to meet the demands which may arise at any moment in relation to the general banking liabilities of the country which have so enormously increased. The bankers have been exhorted by the highest official authority to increase their own reserves. They have done so, but have their efforts and their self-denial in putting aside large sums for this purpose been adequately met?

While the bankers have, in response to the desires referred to, notably increased their own specie reserves, the amount of specie required to be held against the notes issued by the Bank of England may now relatively be less.

This point has been referred to in the preface, but a more complete explanation is advisable. The facts are as follows: The amount of securities in the Issue Department of the Bank is defined by Clauses II., V., and VI. of the Act of 1844, and by Schedule (A.), referred to in Clause VI.

* See articles on "Progress of Banking," No. 3 in April numbers (1894-1903) of the *Bankers' Magazine*.

These are as follows :—

Anno Septimo et Octavo Victoriae Regine, Cap. xxxii.

An Act to regulate the Issue of Bank Notes, and for giving to the Governor and Company of the Bank of *England* certain Privileges for a limited Period. [19th July, 1844.]

Clause II.—And be it enacted, That upon the ^{August} Thirty-first Day of ^{Management of} One thousand eight hundred and forty-four there shall be transferred, appropriated, and set apart by the said Governor and Company to the Issue Department of the Bank of *England* Securities to the Value of ^{the Issue} Fourteen Million Pounds, whereof the Debt due by the Public to the ^{by Bank of} said Governor and Company shall be and be deemed a Part; and there shall also at the same Time be transferred, appropriated, and set apart by the said Governor and Company to the said Issue Department so much of the Gold Coin and Gold and Silver Bullion then held by the Bank of *England*, as shall not be required by the Banking Department thereof; and thereupon there shall be delivered out of the said Issue Department into the said Banking Department of the Bank of *England* such an Amount of Bank of *England* Notes as, together with the Bank of *England* Notes then in circulation, shall be equal to the aggregate, Amount of the Securities, Coin, and Bullion so transferred to the said Issue Department of the Bank of *England*; and the whole amount of Bank of *England* Notes then in Circulation, including those delivered to the Banking Department of the Bank of *England* as aforesaid, shall be deemed to be issued on the Credit of such Securities, Coin, and Bullion so appropriated and set apart to the said Issue Department; and from thenceforth it shall not be lawful for the said Governor and Company to increase the Amount of Securities for the Time being in the said Issue Department, save as herein-after is mentioned, but it shall be lawful for the said Governor and Company to diminish the Amount of such Securities, and again to increase the same to any Sum not exceeding in the whole the Sum of Fourteen million Pounds, and so from Time to Time as they shall see Occasion; and from and after such Transfer and Appropriation to the said Issue Department as aforesaid it shall not be lawful for the said Governor and Company to issue Bank of *England* Notes, either into the Banking Department of the Bank of *England* or to any Persons or Person whatsoever, save in exchange for other Bank of *England* Notes, or for Gold Coin or for Gold or Silver Bullion received or purchased for the said Issue Department under the Provisions of this Act, or in exchange for Securities, acquired and taken in the said Issue Department under the Provisions herein contained: Provided always, that it shall be lawful for the said Governor and Company in their Banking Department to issue all such Bank of *England* Notes as they shall at any Time receive from the said Issue Department or otherwise, in the same Manner in all respects as such Issue would be lawful to any other Person or Persons.

Clause V.—Provided always, and be it enacted, That if any Banker who on the Sixth Day of *May* One thousand eight hundred and forty-four was issuing his own Bank Notes shall cease to issue his own Bank Notes,

CONCLUSION

[CH. XXI]

in the Issue it shall be lawful for Her Majesty in Council, at any Time after the Depart- Cessation of such Issue, upon the Application of the said Governor and ment, and Company, to authorize and empower the said Governor and Company to issue additional notes. increase the Amount of Securities in the said Issue Department beyond the total Sum or Value of Fourteen million Pounds, and thereupon to issue additional Bank of *England* Notes to an Amount not exceeding such increased Amount of Securities specified in such Order in Council, and so from Time to Time: Provided always, that such increased Amount of Securities specified in such Order in Council shall in no Case exceed the Proportion of Two Thirds the Amount of Bank Notes which the Banker so ceasing to issue may have been authorized to issue under the Provisions of this Act; and every such Order in Council shall be published in the next succeeding *London Gazette*.

Account to be rendered by the Bank of England. Clause VI.—And be it enacted, That an Account of the Amount of Bank of *England* Notes issued by the Issue Department of the Bank of *England*, and of Gold Coin and of Gold and Silver Bullion respectively, and of Securities in the said Issue Department, and also an Account of the Capital Stock, and the Deposits, and of the Money and Securities belonging to the said Governor and Company in the Banking Department of the Bank of *England*, on some Day in every Week to be fixed by the Commissioners of Stamps and Taxes, shall be transmitted by the said Governor and Company weekly to the said Commissioners in the Form prescribed in the Schedule hereto annexed marked (A), and shall be published by the said Commissioners in the next succeeding *London Gazette* in which the same may be conveniently inserted.—7^o et 8^o Victoriae, cap. 32, §§ II., V., VI.

SCHEDULE (A.)

BANK OF ENGLAND.

An Account pursuant to the Act 7 and 8 Vict. Cap. xxxii. for the Week ending on the day of

Issue Department.

Notes Issued	£		Government Debt	£
			Other Securities	
			Gold Coin and Bullion	
			Silver Bullion	
	£			£

Dated the Day of 18 Cashier.

Banking Department.

Proprietors' Capital	£	Government Securities (including Dead Weight Annuity)	£
Rest		Other Securities	
Public Deposits (to include Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts)		Notes	
Other Deposits		Gold and Silver	
Seven Day and other Bills	£		£

Dated the Day of 18 Cashier.

The effect of Clause V. has been that the issue of Bank of England notes against securities has since 1844 been increased by £4,175,000. The dates at which this increase took place and the amounts added are as follows:—

FIXED ISSUE OF THE BANK OF ENGLAND.

Amount authorised by the Act of 1844	£14,000,000
Add increase since in authorised amount: 1855—Dec. 7th	£475,000
" " " " 1861—July 10th	175,000
" " " " 1866—Feb. 21st	350,000
" " " " 1881—April 1st	750,000
" " " " 1887—Sept. 15th	450,000
" " " " 1889—Feb. 8th	250,000
" " " " 1894—Jan. 29th	350,000
" " " " 1900—March 3rd	975,000
" " " " 1902—Aug. 11th	400,000
	4,175,000
	£18,175,000

Hence the amount of bank notes issued may be larger now than formerly, and yet the amount of gold required to be held against the notes issued may relatively be less. This has occurred on several occasions. For convenience of reference I will use the example employed earlier in this volume—the comparison between the position of the Issue Department on 2nd July, 1879, and 12th November, 1902, adding the figures of the Banking Department at both these dates, as this completes the statement.

The figures are:—

ISSUE DEPARTMENT, 2nd July, 1879.

Notes Issued	£49,022,675	Government Debt	£11,015,100
		Other Securities	3,984,900
		Gold Coin and Bullion	34,022,675
	£49,022,675		£49,022,675

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities	£14,480,146
Rest	3,171,027	Other Securities	20,024,691
Public Deposits *	7,279,300	Notes	19,485,810
Other Deposits	9,957,815	Gold and Silver Coin	1,263,594
Seven-day and other Bills	293,099		
	£55,254,241		£55,254,241

F. MAY, Chief Cashier.

Dated July 3rd, 1879.

* Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

ISSUE DEPARTMENT, 12th November, 1902.			
Notes Issued	£49,339,090		
	<u>£49,339,090</u>		
BANKING DEPARTMENT.			
Proprietors' Capital	£14,553,000	Government Securities	£16,416,132
Rest	3,177,895	Other Securities	26,890,956
Public Deposits *	8,637,637	Notes	20,278,055
Other Deposits	39,264,304	Gold and Silver Coin	2,183,827
Seven-day and other Bills	136,134		
	<u>£65,768,970</u>		<u>£65,768,970</u>

Dated November 13th, 1902.

J. G. NAIRNE, Chief Cashier.

* Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

The notes issued July 2nd, 1879, were £49,022,675.
They were balanced by :—

Gold Securities	£34,022,675
	<u>15,000,000</u>
	<u>£49,022,675</u>

They were divided thus :—

£29,536,865 in the hands of the public.
19,485,810 held by the Bank.
<u>£49,022,675</u>

The notes issued November 12th, 1902, were £49,339,090.
They were balanced by :—

Gold Securities	£31,164,090
	<u>18,175,000</u>
	<u>£49,339,090</u>

They were divided thus :—

£29,061,035 in the hands of the public.
20,278,055 held by the Bank.
<u>£49,339,090</u>

To recapitulate :—

Notes issued July 2nd, 1879	£49,022,675	Gold July 2nd, 1879	£34,022,675
" Nov. 12th, 1902	49,339,090	" Nov. 12th, 1902	31,164,090
Notes issued in 1902 more	316,415	Gold less in 1902	2,858,585
Gold less	2,858,585	Securities more in 1902 as compared with 1879	£3,175,000
	<u>£3,175,000</u>		

This statement shows what the effect of the working of Clause V. of the Act of 1844 was on the Issue Department at the two dates referred to. The notes issued were in November, 1902, £316,415 more than in July, 1879, but the gold held against the notes was £2,858,585 less. To consider these matters fully would lead me beyond the limits of the subject to which these pages are devoted. It is sufficient here to call

attention to the amount of the specie held on the two occasions mentioned above.

It cannot be expected that the duty of maintaining an adequate reserve to meet the requirements of all the banks of the country could be accepted by the Bank of England alone, yet the tendency of business is to leave no unemployed money outside the Bank of England. To meet ordinary risks a larger supply of unused money is much wanted. It would also undoubtedly tend to more equable rates, and this would be of great advantage to the commerce of the country. Competition in business between this country and the leading countries of Europe is now exceedingly severe, and the advantage in the way of discounts which a trader may often obtain abroad might be quite sufficient of itself to turn the scale against his English competitor. What is stated in Chapter XX. p. 203 shows this clearly. Yet we do not seem nearer to the attainment of a really sufficient reserve now than we were when the Bank Act of 1844 was passed. To provide a compulsory amount of reserve by legal enactment would be unadvisable, but the object desired might be secured if an agreement on the subject could be attained by the principal banks of the country.

It is not, in any time of pressure, the amount of capital in the country which is taken into account, or which governs the immediate price of money. It is not the amount of coin or of notes in circulation. It is the actual amount of specific reserve in hand, and the power of meeting and neutralising the effect of the foreign exchanges, when unfavourable, which decide the stability of the money market. Many exceptional causes, it will be said, have led to the recent fluctuations in the money market—to the vast number of changes in the rate of interest in recent years. But with the immensely extended commerce now carried on by this country, such causes, or similar causes, will be certain continually to manifest themselves, and the only safe course is to be prepared to meet them. To do this we must be prepared to increase the amount of "unused" capital in the country, now so exceedingly and unduly small.

To arrange this will require time, and an agreement between
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the principal banks. I trust that the analysis of the transactions of the Bank of England and of the principal Banks of Europe which this work contains will be of service by showing clearly what is needed. In banking, the only secure position is that of strength, and that strength is connected most closely with the maintenance of an adequate reserve.

It is to the development of such a reserve that the energy of the Bankers of the United Kingdom should now be directed.